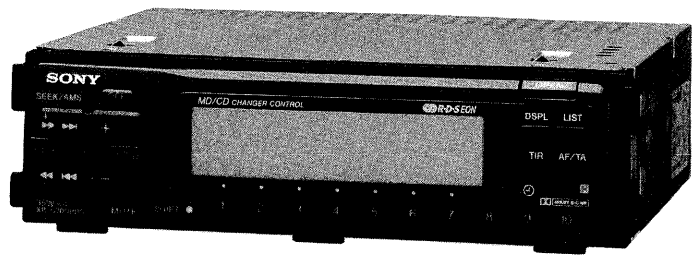
XR-C700RDS

SERVICE MANUAL

AEP Model
UK Model



Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-52B-135

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	30 – 20,000 Hz
Signal-to-noise ratio	

Cassette type	Dolby B NR	Dolby C NR	Dolby NR off
TYPE II, III, IV	67 dB	73 dB	61 dB
TYPE I	64 dB	70 dB	58 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	
	0.5 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

MW/LW (SW, for Germany, Switzerland and Austria)

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 281 kHz SW: 5,950 – 6,205 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.71 MHz/450 kHz
Sensitivity	MW: 30 μV LW: 50 μV SW: 50 μV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	35 W × 4 (at 4 ohms)

General

Outputs	Line outputs (3) Power aerial relay control lead Power amplifier control lead
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 188 × 58 × 177 mm (w/h/d)
Mounting dimension	Approx. 182 × 53 × 162 mm (w/h/d)
Mass	Approx. 1.3 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary remote RM-X2S (1)

Design and specifications are subject to change without notice.

FM/MW/LW(SW) CASSETTE CAR STEREO

SONY®

TABLE OF CONTENTS

1. GENERAL

Location of controls 3
Getting Started 3
Cassette Player 4
Radio 5
RDS 5
Other Functions 8
CD/MD Changer 9
DSP 12
Connections 14

2. DISASSEMBLY

2-1. Cover 16
2-2. Front Panel Assy 16
2-3. Sub Panel 17
2-4. Heat Sink 17
2-5. Mechanism Deck Block 18
2-6. Main Board 18

3. ASSEMBLY OF MECHANISM DECK

3-1. Alignment of Rotary Switch 19
3-2. Gear (LDG-E) 19
3-3. Chassis (S) Assy 20
3-4. Lever (Mode) 20
3-5. Lever (Pinch Selection) 21
3-6. Head Plate Assy 21
3-7. Lever (Pinch) Assy 22
3-8. Housing 22
3-9. Arm (Suction) 23
3-10. Lever (LDG-B) 23
3-11. Gear (LDG-FT) 24
3-12. Guide (C) 24

4. MECHANICAL ADJUSTMENTS 25

5. ELECTRICAL ADJUSTMENTS

Deck Section 25
Tuner Section 26

6. DIAGRAMS

6-1. IC Pin Descriptions 30
6-2. Block Diagram 34
6-3. Printed Wiring Boards—Main Section— 38
6-4. Schematic Diagram—Main Section— 43
6-5. Schematic Diagram—Panel Section— 48
6-6. Printed Wiring Board—Panel Section— 51

7. EXPLODED VIEWS

7-1. Chassis Section 58
7-2. Front Panel Section 59
7-3. Mechanism Deck Section 1 60
7-4. Mechanism Deck Section 2 61

8. ELECTRICAL PARTS LIST 62

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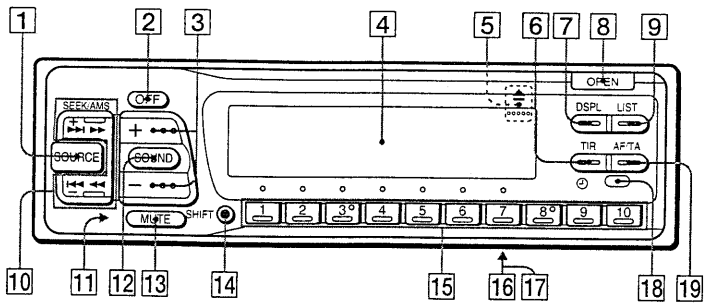
Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Location of controls



Refer to the pages for details.

1 SOURCE (source select) button 6, 7, 8, 10, 15, 16, 19, 21, 23, 24

2 OFF button 4, 6

3 ⊕ ⊖ (volume/bass/treble/balance/fader control) button 14, 19, 21, 22, 23, 24

4 Display window

5 ⏏ (eject) button (located on the front side of the unit hidden by the front panel) 6

6 TIR button 11

7 DSPL button (display mode change) button 6, 8, 15, 19

8 OPEN button 4, 6

9 LIST button
Disc Memo 19
DSP Custom File 22
List-up 20
PTY 12

10 SEEK/AMS (seek/Automatic Music Sensor/manual search) button 6, 7, 8, 9, 11, 12, 20

11 Reset button (located on the front side of the unit hidden by the front panel) 4

12 SOUND button 14, 21, 22, 23, 24

13 MUTE button 14

14 SHIFT button
BTM 7, 10
SET UP 5, 12, 14, 24
PLAY MODE 7, 8, 9, 15, 16, 18, 20, 22

15 During radio reception:
Preset number buttons 7, 8
During CD/MD playback:
Direct disc selection button 15

16 POWER SELECT switch (located on the bottom of the unit)
See "POWER SELECT switch" in the Installation/Connections manual.

17 LINE-OUT/IN SELECT switch (located on the bottom of the unit)
See "LINE-OUT/IN SELECT switch" in the Installation/Connections manual.

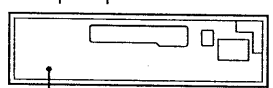
18 Receptor for wireless remote

19 AF/TA button 9, 10

Getting Started

Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.
Press the reset button with a pointed object, such as a ballpoint pen.



Reset button

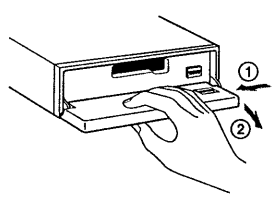
Note
Pressing the reset button will erase all the memorised programmes and memory functions except for the preset stations.

Detaching the front panel

You can detach the front panel of this unit to prevent the unit from being stolen.

1 Press (OFF).

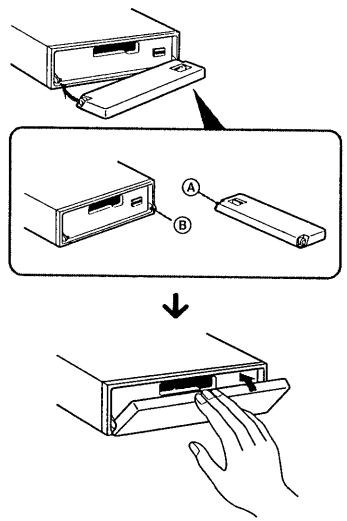
2 **Press (OPEN) to open the front panel, then slide the front panel to the left side, and pull out the right side of the front panel.**



Notes
- *Do not put anything on the inner surface of the front panel.*
- *Be sure not to drop the panel when detaching it from the unit.*
- *If you detach the panel while the unit is still on, the power will turn off automatically to prevent the speakers from being damaged.*
- *When you carry the front panel with you, put it in the supplied front panel case.*

Attaching the front panel

Place the hole Ⓐ in the front panel onto the spindle Ⓑ on the unit as illustrated, then push the left side in.



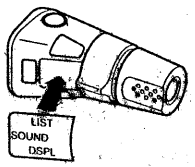
Notes
- *Be sure not to attach the front panel upside down.*
- *Do not press the front panel hard against the unit when attaching it. Press it lightly against the unit.*
- *Do not press hard or put excessive pressure on the display windows of the front panel.*
- *Do not expose the front panel to direct sunlight, heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight where there may be a considerable rise in temperature.*

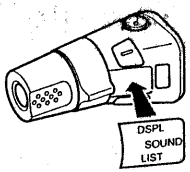
Caution alarm

If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the POWER SELECT switch is set to the Ⓐ position).

Preparing the rotary remote

When you mount the rotary remote, attach the label in the illustration below.



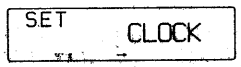


Setting the clock

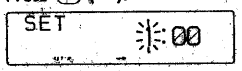
The clock has a 24-hour digital indication.

Example: Set the clock to 10:08

1 Press (SHIFT), then press (2) (SET UP).



❶ Press (4) (→).

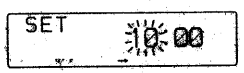


The hour digit flashes.

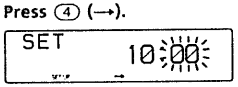
❷ Set the hour.

to go forward

to go back



❸ Press (4) (→).

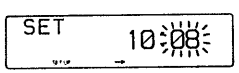


The minute digits flash.

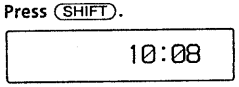
❹ Set the minute.

to go forward

to go back



2 Press (SHIFT).



The clock starts.

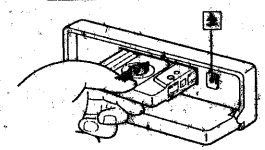
Note

If the POWER SELECT switch on the bottom of the unit is set to the ❻ position, turn the power on first, then set the clock.

Cassette Player

Listening to the tape

1 Press (OPEN) and insert the cassette.

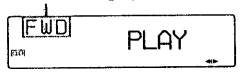


Playback starts automatically.

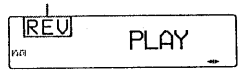
2 Close the front panel.

If the cassette is already inserted, press (SOURCE) until "FWD" or "REV" appears to start playback.

The side facing up is being played.



The side facing down is being played.



Tips

- *To change the tape transport direction, press (7) (◀II▶).*
- *"METAL" appears in the display when you insert the metal or CrO_2 tape (Auto Metal function).*

To	Press
Stop playback	(OFF)
Eject the cassette	(OPEN) then ⏏

Fast-winding the tape

During playback, press either side of (SEEK/AMS) for one second.

Fast-forward

Rewind

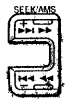
To start playback during fast-forwarding or rewinding, press (7) (◀II▶).

Locating the beginning of the tracks

— Automatic Music Sensor (AMS)

You can skip up to nine tracks at one time.

During playback, press either side of (SEEK/AMS) momentarily.



To locate the succeeding tracks

To locate the previous tracks

Note

The AMS function may not work when :

- *the blanks between tracks are shorter than four seconds.*
- *there are noises.*
- *there are long sections of low volume or quiet sections.*

Changing the displayed items

Each time you press (DSPL), the item changes as follows:

Tape playback → Clock → Frequency*

** While the ATA function is activated.*

Playing the tape in various modes

You can play the tape in various modes:
- INTRO (Intro Scan) lets you play the first 10 seconds of all the tracks.
- REPEAT (Repeat Play) repeats the current track.
- NR (Dolby NR) lets you select the Dolby* NR B or C system.
- ATA (Automatic Tuner Activation) turns on the tuner automatically while fast-winding the tape.
- BL.SKP (Blank Skip) skips blanks longer than eight seconds.

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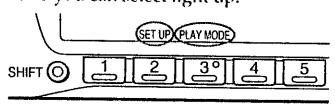
1 **Press (SHIFT).**
Every time you press (SHIFT), only the items you can select light up.



2 **Press ③ (PLAY MODE), repeatedly until the desired play mode appears.**
Each time you press ③, the item changes as follows:

INTRO → REPEAT → NR → ATA → BL. SKP

3 **Press ④ (→) to select the desired play mode setting (for example: ON, NR B or NR C).**

Playback starts.

To go back to the normal playback mode, select "OFF" in step 3 above.

Radio

Memorising stations automatically

— Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals and memorises them in the order of their frequencies. You can store up to 10 stations on each band (FM 1, FM 2, MW and LW/SW).

Caution
When tuning in the station while driving, use Best Tuning Memory to prevent accidents.

1 **Press (SOURCE) repeatedly to select the desired band (FM 1, FM 2, MW and LW/SW).**

2 **Press (SHIFT), then press ⑥ (BTM).**
The unit stores stations in the order of their frequencies on the number buttons.
A beep sounds and the setting is stored.

Notes
- *The unit does not store stations with weak signals. If only a few stations are received, some number buttons remain empty.*
- *When a preset number is indicated in the display, the unit starts storing stations from the one currently displayed.*

Memorising only the desired stations

You can store up to 10 stations on each band (20 for FM 1 and FM 2, 10 for MW or LW/SW) in the order of your choice.

1 **Press (SOURCE) repeatedly to select the desired band.**

2 **Press either side of (SEEK/AMS) to tune in the station that you want to store on the number button.**

3 **Keep the desired number button (① to ⑩) pressed for two seconds until you hear a beep tone.**

The number button indication appears in the display.

Note
If you try to store another station on the same number button, the previously stored station will be erased.

Receiving the memorised stations

1 **Press (SOURCE) repeatedly to select the desired band.**

2 **Press the number button (① to ⑩) momentarily, where the desired station is stored.**

If you cannot tune in a preset station

Press either side of (SEEK/AMS) momentarily to search for the station (automatic tuning).
Scanning stops when the unit receives a station. Press either side of (SEEK/AMS) repeatedly until the desired station is received.

Note
If the automatic tuning stops too frequently, press (SHIFT), then press ③ (PLAY MODE) repeatedly until "LOCAL" (local seek mode) is displayed. Then press ④ (→) to select "ON."
Only the stations with relatively strong signals will be tuned in.

Tip
If you know the frequency of the station you want to listen to, press and hold either side of (SEEK/AMS) for two second, until the desired frequency appears (manual tuning).

If FM stereo reception is poor

— Monaural Mode

1 **Press (SHIFT), then press ③ (PLAY MODE) repeatedly until "MONO" appears.**

2 **Press ④ (→) repeatedly until "MONO ON" appears.**
The sound improves, but becomes monaural ("STEREO" disappears).

To go back to the normal mode, select "MONO OFF" in step 2 above.

Changing the displayed items

Each time you press (DSPL), the item changes as follows:

Frequency ⟷ Clock

RDS

Overview of the RDS function

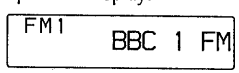
Radio Data System (RDS) is a broadcasting service that allows FM stations to send additional digital information along with the regular radio programme signal. Your car stereo offers you a variety of services. Here are just a few: re-tuning the same programme automatically, listening to traffic announcements and locating a station by programme type.

Notes
- *Depending on the country or region, not all of the RDS functions are available.*
- *RDS may not work properly if the signal strength is weak or if the station you are tuned in is not transmitting RDS data.*

Displaying the station name

The name of the station currently received lights up in the display.

Select an FM station.
When you tune in an FM station that transmits RDS data, the station name lights up on the display.



Note
The "" indication means that an RDS station is being received.*

Changing the displayed items

Each time you press (DSPL), the item changes as follows:

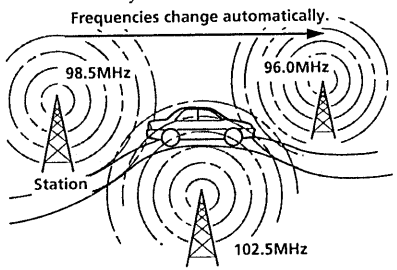
→ Frequency → Clock → Station name →

Note
"NO Name" appears if the station received does not transmit RDS data.

Re-tuning the same programme automatically

— Alternative Frequencies (AF)

The Alternative Frequencies (AF) function automatically selects and re-tunes the station with the strongest signal in a network. By using this function, you can continuously listen to the same programme during a long-distance drive without having to re-tune the station manually.



1 **Select an FM station.**

2 **Press (AF/TA) repeatedly until "AF ON" appears.**
The unit starts searching for an alternative station with a stronger signal in the same network.

Note
When there is no alternative station in the area and you don't need to search for an alternative station, turn the AF function off by pressing (AF/TA) repeatedly until "AF TA OFF" appears.

Changing the displayed items

Each time you press (AF/TA), the items change as follows:

AF ON → TA ON → AF TA ON* → AF TA OFF →

** Select this to turn on both the AF and TA functions.*

Notes
- *"NO AF" and the station name flash alternately, if the unit cannot find an alternative station in the network.*
- *If the station service name starts flashing after you've made the preset selection, it means that no alternative frequency is available, and the unit cannot receive the PI (Programme Identification) data of the memorised station. Press (SEEK/AMS) while the station service name is flashing (for about eight seconds) so the unit starts searching for a station with the same PI data, but on another frequency ("PI seek" appears and no sound is heard). If the unit still cannot find an alternative station, "NO PI" appears and the unit goes back to the original preset station.*

Listening to a regional programme

The "REG ON" (regional on) function of this unit lets you stay tuned to a regional programme without being switched to another regional station. (Note that you must turn the AF function on.) The unit is factory preset to "REG ON", but if you want to turn off the function, do the following.

Press (SHIFT), then press (3) (PLAY MODE) repeatedly until "REG OFF" appears.
Note that selecting "REG OFF" might cause the unit to switch to another regional station within the same network.

Note
This function does not work in the United Kingdom and in some other areas.

Local link function (United Kingdom only)

The Local Link function lets you select other local stations in the area, even though they are not stored on your preset number buttons.

1 **Press a preset number button that has a local station stored on it.**

2 **Within five seconds, press the preset number button of the local station again.**

3 **Repeat this procedure until the desired local station is received.**

Listening to traffic announcements

The Traffic Announcement (TA) and Traffic Programme (TP) data let you automatically tune in an FM station that is broadcasting traffic announcements even though you are listening to other programme sources.

Press (AF/TA) repeatedly until "TA ON" or "AF TA ON" appears.
The unit starts searching for traffic information stations. "TP" lights up in the display when the unit finds a station broadcasting traffic announcements. When the traffic announcement starts, "TA" flashes. The flashing stops when the traffic announcement is over.

continue to next page →

Tip
If the traffic announcement starts while you are listening to another programme source, the unit automatically switches to the announcement and goes back to the original source when the announcement is over.

Notes
- *"NO TP" flashes for five seconds if the received station doesn't broadcast traffic announcements. Then, the unit starts searching for a station that does broadcast traffic announcements.*
- *When "EON" appears with "TP" in the display, the current station makes use of broadcast traffic announcement of other stations in the same network.*

To cancel the current traffic announcement

Press (AF/TA) momentarily.
To cancel all traffic announcements, turn off the function by pressing (AF/TA) until "AF TA OFF" appears.

Presetting the volume of traffic announcements

You can preset the volume level of the traffic announcements beforehand so you won't miss the announcement. When a traffic announcement starts, the volume will be automatically adjusted to the preset level.

1 **Select the desired volume level.**

2 **Press (AF/TA) for two seconds.**
A beep sounds and the setting is stored.

Receiving emergency announcements

If an emergency announcement comes in while you are listening to the radio, the programme will be automatically switched to the announcement. If you are listening to a source other than the radio, the emergency announcements will be heard if you set AF or TA to on. The unit will then automatically switch to these announcements no matter what you are listening to at the time.

Presetting the RDS stations with the AF and TA data

When you preset the RDS stations, the unit stores each station's data as well as its frequency, so you don't have to turn on the AF or TA function every time you tune in the preset station. You can select a different setting (AF, TA, or both) for individual preset station, or the same setting for all preset stations.

Presetting the same setting for all preset stations

1 **Press (SOURCE) to select an FM band.**

2 **Press (AF/TA) repeatedly to select either "AF ON", "TA ON" or "AF TA ON" (for both AF and TA functions).**
Note that selecting "AF TA OFF" stores not only RDS stations, but also non-RDS stations.

3 **Press (SHIFT) then, press (6) (BTM).**

Presetting different settings for each preset station

1 **Select an FM band, and tune in the desired station.**

2 **Press (AF/TA) repeatedly to select either "AF ON", "TA ON" or "AF TA ON" (for both AF and TA functions).**

3 **Press the desired preset number button for two seconds until a beep sounds.**
Repeat from step 1 for presetting other stations.

Tip
If you want to change the preset AF and/or TA setting after you tuned in the preset station, you can do so by turning on/off the AF or TA function.

Recording the traffic announcements

—Traffic Information Replay (TIR)

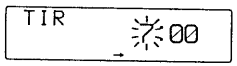
You can listen to the latest traffic announcement by recording them. Every time a traffic announcement starts, the unit automatically records and stores up to eight traffic announcements. If the recording exceeds eight minutes, the recorded announcements are updated, so you can always listen to the latest information.
The TIR function turns on the unit automatically and records the traffic announcements for up to two hours before and after a preset time.

Presetting the time and the station

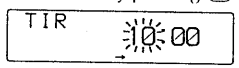
1 Press (TIR) for two seconds until "TIR" lights up on the display.

2 Press (4) (→) repeatedly until "TIR ON" appears.

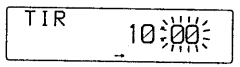
3 Press (TIR) repeatedly until the time indication appears.



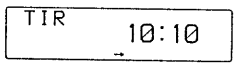
❶ Set the hour by pressing (+) or (−).



❷ Press (4) (→) until the minute digit flashes.



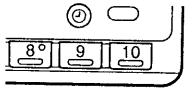
❸ Set the minutes by pressing (+) or (−).



4 Press (TIR).

5 Select the desired station by pressing the preset number button or either side of (SEEK/AMS).

6 Press (TIR) for two seconds to return to the original display.
◴ lights up.



The unit turns on automatically and stands by for traffic announcements for four hours (two hours before and after the preset time).
If the preset station does not broadcast the traffic announcement while searching, it starts searching for other traffic programme (TP) stations.

To cancel the TIR function

Select "TIR OFF" in step 2 above.

Tips
- *While the unit is recording the traffic announcement, ◴ and "TP" flash.*
- *If the unit still cannot find a TP station, it starts searching every five minute until it finds one.*

Notes
- *The unit also stands by for traffic announcements for two hours after you turn off the engine, as long as the TIR function is on.*
- *If you have a power aerial, it automatically extends every time the unit searches for a traffic programme station. If you have a manual aerial, make sure that the aerial is fully extended.*
- *If you will not use your car for long time, make sure to turn off the TIR function to conserve the car battery power.*

Playing back the recorded traffic announcements

When there are recorded traffic announcements you have not listened to yet, ◴ flashes.

1 Press (TIR).
The latest traffic announcement is played back. To listen to the previous ones, press (TIR) or + side of (SEEK/AMS).
To replay the announcements, press the − side of (SEEK/AMS).
"NO Data" appears if no traffic announcements were recorded.

2 Press (TIR) to go back to the original programme.

Locating a station by programme type

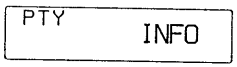
You can locate the station you want by selecting one of the programme types shown below.

Note
If the countries or regions where EON data is not transmitted, you can use this function only for the stations you have tuned in once.

Programme types	Display
News	NEWS
Current Affairs	AFFAIRS
Information	INFO
Sports	SPORT
Education	EDUCATE
Drama	DRAMA
Culture	CULTURE
Science	SCIENCE
Varied	VARIED
Popular Music	POP M
Rock Music	ROCK M
Middle of the Road Music	M.O.R. M
Light Classical	LIGHT M
Classical	CLASSICS
Other Music Type	OTHER M
Not specified	NONE

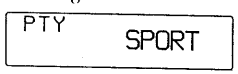
Note
You can not use this function in some countries where no PTY (Programme Type selection) data is available.

1 Press (LIST) during FM reception until "PTY" appears.



The current programme type name appears if the station is transmitting the PTY data.
"- - - - -" appears if the received station is not an RDS station, or if the RDS data has not been received.

2 Press (LIST) repeatedly until the desired programme type appears.
The programme types appear in the order shown in the above table. Note that you cannot select "NONE" (Not specified) for searching.

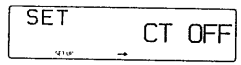


3 Press either side of (SEEK/AMS).
The unit starts searching for a station broadcasting the selected programme type. When the unit finds the programme, the programme type appears again for five seconds.
"NO" and the programme type appear alternately for five seconds if the unit cannot find the programme type. It then returns to the previous station.

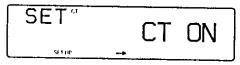
Setting the clock automatically

The CT (Clock Time) data from the RDS transmission sets the clock automatically.

1 Press (SHIFT) then press (2) (SET UP) repeatedly until "CT" appears.



2 Press (4) (→) repeatedly until "CT ON" appears.
The clock is set.



3 Press (SHIFT) to return to the normal display.

To cancel the CT function

Select "CT OFF" in step 2 above.

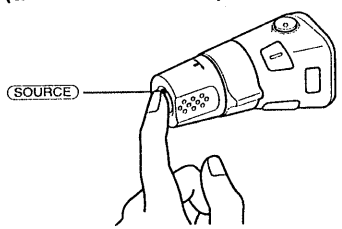
Notes
- *The CT function may not work even though an RDS station is being received.*
- *There might be a difference between the time set by the CT function and the actual time.*

Other Functions

Using the rotary remote

The rotary remote works by pressing buttons and/or rotating controls.
You can control the optional CD or MD changer with the rotary remote.

By pressing the button (the SOURCE button)



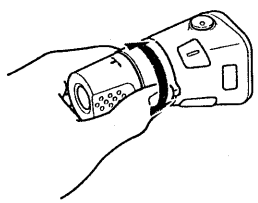
Each time you press (SOURCE), the source changes as follows:

FM1 → FM2 → MW → LW (SW) → CD1 → CD2 → MD1 → MD2

Tip

When the POWER SELECT switch is set to position B, you can turn on this unit by pressing (SOURCE) on the rotary remote.

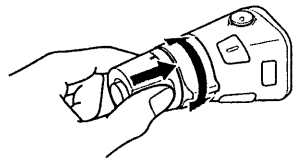
By rotating the control (the SEEK/AMS control)



Rotate the control momentarily and release it to:

- Locate a specific track on a tape or a disc. Rotate and hold the control to locate the specific point in a track, then release it to start playback.
- Tune in the stations automatically. Rotate and hold the control to tune in the specific station.

By rotating the control while pushing (the PRESET/DISC control)

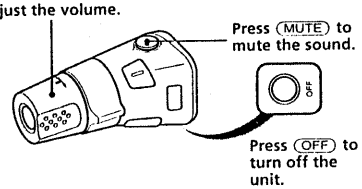


Rotate the control while pushing it to:

- Receive the stations memorised on the preset buttons.
- Change the disc.

Other operations

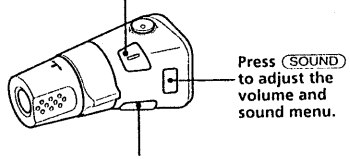
Rotate the VOL control to adjust the volume.



Press (MUTE) to mute the sound.

Press (OFF) to turn off the unit.

Press (DSPL) to change the displayed items.

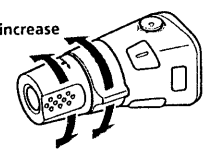


Press (SOUND) to adjust the volume and sound menu.

Press (LIST) to display memorised names.

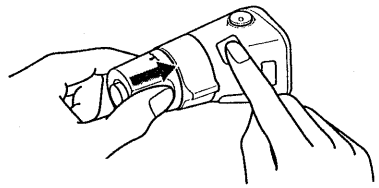
Changing the operative direction

The operative direction of controls is factory preset as in the illustration below.



continue to next page →

If you need to mount the rotary remote on the right of the steering column, you can reverse the operative direction of the controls.



Press (DSPL) two seconds while pushing the VOL control.

Tip

You can control the operative direction of controls with the unit.

Adjusting the sound characteristics

You can adjust the bass, treble, balance and fader.
Each source can store the bass and treble level respectively.

1 Select the item you want to adjust by pressing (SOUND) repeatedly.

VOL (volume) → BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader)

2 Adjust the selected item by pressing + or −.
Adjust within three seconds after selecting. (After three seconds, the buttons work as volume control buttons.)

Muting the sound

Press (MUTE).
"MUTE ON" flashes.

To restore the previous volume level, press (MUTE) again.

Tip

The unit decreases the volume automatically when a telephone call comes in (Telephone-mute function).

Changing the sound and display settings

You can set:

- AMBER/GREEN to change the illumination colour to amber or green.
- BEEP to turn on or off the beeps.
- DIMMER (dimmer) to change the brightness of the display.
- D. INFO (dual information) to display the clock and the play mode at the same time (ON) or to display the information alternately (OFF).
- LOUD (Loudness) to enjoy bass and treble even at low volume. Bass and treble will be reinforced.
- RM (Rotary Remote) to change the operative direction of the controls of the rotary remote.
  — Select "NORM" to use the rotary remote as the factory preset position.
  — Select "REV" when you mount the rotary remote on the right of the steering column.

1 Press (SHIFT), then press (2) (SET UP).

2 Press (2) (SET UP) repeatedly until the desired setting mode appears.

Each time you press (2) (SET UP), the item changes as follows:

CLOCK → AMBER/GREEN → BEEP → DIMMER → CT → D. INFO → LOUD → RM

3 Press (4) (→) to select the desired setting (for example: ON or OFF).

4 Press (SHIFT).
When the mode setting is complete, the normal playback mode appears.

With Optional Equipment

CD/MD Changer

You can control up to 10 CD changers and MD changers with this unit.

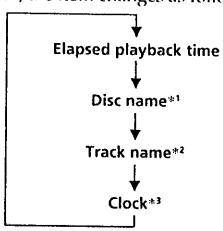
Playing a CD or MD

Press (SOURCE) until the desired changer appears.
CD/MD playback starts.

When a CD or MD changer is connected, all the tracks play from the beginning.

Changing the displayed items

Each time you press (DSPL) during CD/MD playback, the item changes as follows:



*1 *If you have not labeled the CD, "NO Name" appears in the display. If there is no prerecorded name for an MD, "NO D. Name" appears in the display.*
*2 *If the track name of the MD is not prerecorded, "NO T. Name" appears in the display.*
*3 *If the dual information is on, clock does not appear in the display.*

Tip
If the name of the MD is too long, you can scroll it across the display by pressing (SHIFT), then (1) (←).

Automatically scrolling a disc name — Auto Scroll

The Auto Scroll function automatically scrolls the disc or track name of the MD when you press (DSPL) and the name length exceeds ten characters.

1 **Press (SHIFT), then press (2) (SET UP) repeatedly until "A. SCRL." appears.**

2 **Press (4) (→) to select "A. SCRL ON."**

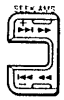
To cancel Auto Scroll, select "A. SCRL OFF" in step 2 above.

Displaying the recording date of the currently selected MD

Press (DSPL) for two seconds during MD playback.
The recording date of the track is displayed for about three seconds.

Locating a specific track — Automatic Music Sensor (AMS)

During playback, press either side of (SEEK/AMS) once for each track you want to skip.

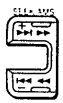


To locate succeeding tracks

To locate previous tracks

Locating a specific point in a track — Manual Search

During playback, press and hold either side of (SEEK/AMS). Release the button when you have found the desired point.



To search forward

To search backward

Locating a disc by disc number — Direct Disc Selection

Press the number button that corresponds with the desired disc number.
The desired disc in the currently selected changer begins playback.

Scanning the tracks

— Intro Scan

You can play the first 10 seconds of all the tracks on the currently selected disc.

1 **During playback, press (SHIFT), then press (3) (PLAY MODE) repeatedly until "INTRO" appears.**

2 **Press (4) (→) repeatedly until "INTRO ON." appears.**
Intro Scan starts.

To go back to the normal playback mode, select "INTRO OFF" in step 2 above.

Playing tracks repeatedly

— Repeat Play

You can select:
- REP 1 to repeat a track.
- REP 2 to repeat a disc.
- REP 3 to repeat all the discs in the current changer.

1 **During playback, press (SHIFT), then press (3) (PLAY MODE) repeatedly until "REP" appears.**

2 **Press (4) (→) repeatedly until the desired setting appears.**

→ REP 1 → REP 2 → REP 3 → REP OFF

Repeat play starts.

To go back to the normal playback mode, select "REP OFF" in step 2 above.

Playing tracks in random order — Shuffle Play

You can select:
- SHUF 1 to play the tracks on the current disc in a random order.
- SHUF 2 to play the tracks in the current changer in a random order.
- SHUF 3 to play all the tracks in a random order.

1 **During playback, press (SHIFT), then press (3) (PLAY MODE) repeatedly until "SHUF" appears.**

2 **Press (4) (→) repeatedly until the desired setting appears.**

→ SHUF 1 → SHUF 2 → SHUF 3 → SHUF OFF

Shuffle play starts.

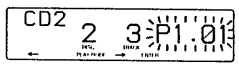
To go back to the normal playback mode, select "SHUF OFF" in step 2 above.

Creating a programme

— CD Programme Memory (CD changer with programme memory function)

You can play the tracks in the order you want by making your own programme. You can make two programmes: Programme 1 and Programme 2. You can select up to 12 tracks in each programme. You can store the programmes in memory.

1 **Press (SHIFT), then press (3) (PLAY MODE) for two seconds.**
Programme edit mode



"P1" shows Programme 1 is selected.

If you have labeled the disc, the bank edit mode appears. Press (3) (PLAY MODE) to display "P1" above.

To select Programme 2, press (4) (→) repeatedly until "P 2" appears.

2 **Select the track you want.**

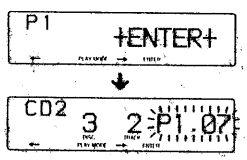
❶ **Press (SOURCE) repeatedly to select the changer.**

❷ **Press (SHIFT), then press the number button to select the disc.**

❸ **Press (SHIFT).**

❹ **Press either side of (SEEK/AMS) to select the track.**

3 **Press (5) (ENTER) momentarily.**



4 **To continue entering tracks, repeat steps 2 and 3.**

5 When you finish entering tracks, press ③ (PLAY MODE) for two seconds.

Notes
- *"*Wait*" appears in the display while the unit is reading the data, or when a disc has not been put into the unit.*
- *"*Mem Full*" appears in the display when you try to enter more than 12 tracks into a programme at one time.*

Playing the stored programme

Changing the disc order in the changer will not affect programme memory play.

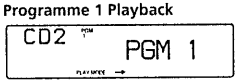
You can select:
- PGM 1 to play Programme 1.
- PGM 2 to play Programme 2.
- PGM 1+2 to play Programmes 1 and 2.

1 Press (SHIFT).

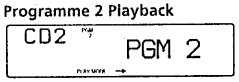
2 Press ③ (PLAY MODE) repeatedly until "PGM" appears.

3 Press ④ (→) repeatedly until the desired programme appears.
Programme play starts.

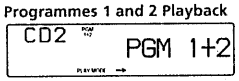
Programme 1 Playback



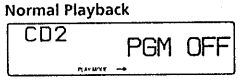
Programme 2 Playback



Programmes 1 and 2 Playback



Normal Playback

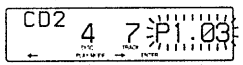


To go back to the normal playback mode, select "PGM OFF" in step 3 above.

Notes
- *If you press the number button during programme memory play, programme memory play is interrupted, and playback of the selected disc starts.*
- *"NO Data" appears in the display if no track is stored in the programme.*
- *If a track stored into the programme memory is not in the disc magazine, the track will be skipped.*
- *When the disc magazine contains not a single track stored into the programme memory, or when the programme information has not been loaded yet, "Not Ready" appears.*

Erasing the entire programme

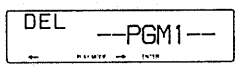
1 Press (SHIFT), then press ③ (PLAY MODE) for two seconds.



"P1" shows Programme 1 is selected.

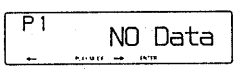
If you have labeled the disc, the bank edit mode appears. Press ③ (PLAY MODE) to display "P1" above.

2 Press ① (←) repeatedly until "DEL" appears.



To erase Programme 2, press ④ (→) repeatedly until "PGM 2" appears.

3 Press ⑤ (ENTER) for two seconds.

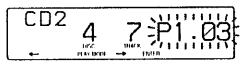


The entire programme is erased.

4 When you finish erasing programmes, press ③ (PLAY MODE) for two seconds.

Adding tracks to the programme

1 Press (SHIFT), then press ③ (PLAY MODE) for two seconds.

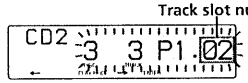


If you have labeled the disc, the bank edit mode appears. Press ③ (PLAY MODE) to display "P1" above.

To select Programme 2, press ④ (→) repeatedly until "P 2" appears.

2 Press ① (←) or ④ (→) to select the track slot number where you want to insert a track.

Track slot number



3 Press either side of (SEEK/AMS) to select the track you want to insert.

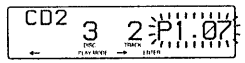
4 Press ⑤ (ENTER) momentarily to enter the track.
The current track in that slot number and the succeeding tracks shift down.
To continue inserting tracks, repeat steps 2 through 4.

Note
*Once all 12 slots have been filled, "*Mem Full*" appears in the display, and you cannot insert tracks.*

5 When you finish inserting tracks, press ③ (PLAY MODE) for two seconds.

Erasing the tracks in the programme

1 Press (SHIFT), then press ③ (PLAY MODE) for two seconds.



"P1" shows Programme 1 is selected.

If you have labeled the disc, the bank edit mode appears. Press ③ (PLAY MODE) to display "P1" above.

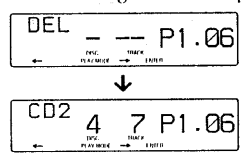
To select Programme 2, press ④ (→) repeatedly until "P 2" appears.

2 Press ① (←) or ④ (→) to select the track you want to erase.

Track Slot Number

The track currently registered in slot 6 of Programme 1.

3 Press ⑤ (ENTER) for two seconds.
When you erase a track from a slot number, the succeeding tracks shift up to fill the gap.



4 To continue erasing tracks, repeat steps 2 and 3.

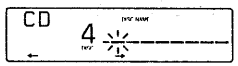
5 When you finish erasing tracks, press ③ (PLAY MODE) for two seconds.

Labeling a CD

— Disc Memo
(CD changer with custom file function)

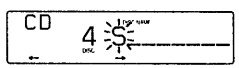
You can label each disc with a personalized name. You can enter up to 8 characters for a disc. If you label a CD, you can locate a disc by name (page 20) and select the specific tracks for playback (page 20).

1 Play the CD and press (LIST) for two seconds.



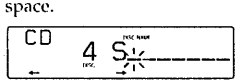
2 Enter the characters.

❶ Press (+) to select the desired characters.
(A → B → C → ··· Z → 0 → 1 → 2 → ··· 9 → + → − → * → / → \ → > → < → . → _)



If you press (−), the characters appear in the reverse order.
If you want to put a blank space between characters, select "_" (under-bar).

❷ Press (4) (→) after locating the desired character.
The flashing cursor moves to the next space.



If you press (1) (←), the flashing cursor moves to the left.

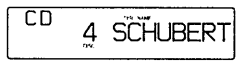
❸ Repeat steps ❶ and ❷ to enter the entire name.

3 To return to the normal CD playback mode, press (LIST) for two seconds.

Tip
To erase/correct a name, enter "_" (under-bar) for each character.

Displaying the disc memo

Press (DSPL) during CD playback.



Each time you press (DSPL) during CD playback, the item changes as follows:

Elapsed playback time → Disc name → Clock →

Erasing the disc memo

1 Press (SOURCE) to select the CD changer.

2 Press (LIST) for two seconds.

3 Press (DSPL) for two seconds.

4 Press (+) or (−) to select the name that you want to erase.

5 Press (5) (ENTER) for two seconds.
The name is erased.
Repeat steps 4 and 5 if you want to erase other names.

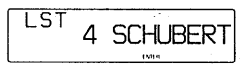
6 Press (LIST) for two seconds.
The unit returns to the normal CD playback mode.

Locating a disc by name

— List-up (CD changer with custom file function or MD changer)

You can use this function for the discs that have been assigned a custom name. For more information on disc names, refer to "Labeling a CD" (page 19).

1 Press (LIST) momentarily.
The name assigned to the disc currently playing appears in the display.



2 Press (LIST) repeatedly until you find the desired disc.

3 Press (5) (ENTER) to play back the disc.

Notes
- *Once a disc name has been displayed for five seconds, the display goes back to its normal playback mode. To turn off the display, press (DSPL).*
- *The track names are not displayed during MD playback.*
- *If there are no discs in the magazine, "NO Disc" appears in the display.*
- *If a disc has not been assigned a custom file, "********" appears in the display.*
- *If the disc information has not been read by the unit, "?" appears in the display. To load the disc, first press the number button, then choose the disc that has not been loaded.*
- *The information is appears only in upper cases. There are also some letters which cannot be displayed (during MD playback).*

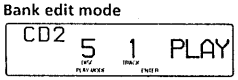
Selecting the specific tracks for playback

— Bank
(CD changer with custom file function)

If you label the disc, you can set the unit to skip tracks and play only the tracks you want.

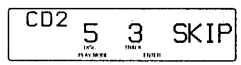
1 Start playing the disc and press (SHIFT). Then press (3) (PLAY MODE) for two seconds.

Bank edit mode



Note
If you have not labeled the disc, the bank edit mode does not appear and the programme edit mode appears. To go back to the normal playback mode, press (SHIFT).

2 Press either side of (SEEK/AMS) to select the track number you want to skip and press (5) (ENTER).



The indication changes from "PLAY" to "SKIP." If you want to return to "PLAY," press (5) (ENTER) again.

3 Repeat step 2 to set the "PLAY" or "SKIP" mode on all the tracks.

4 Press (3) (PLAY MODE) for two seconds.

Notes
- *You can set the "PLAY" and "SKIP" mode on up to 24 tracks.*
- *You cannot set the "SKIP" mode on all the tracks.*

Playing the specific tracks only

You can select:
- BANK ON to play the tracks with the "PLAY" setting.
- BANK INV (inverse) to play the tracks with the "SKIP" setting.

1 During playback, press (SHIFT), then press (3) (PLAY MODE) repeatedly until "BANK" appears.

2 Press (4) (→) repeatedly until the desired setting appears.

BANK ON → BANK INV → BANK OFF

Playback starts from the track following the current one.

To go back to the normal playing mode, select "BANK OFF" in step 2 above.

DSP

With the optional XDP-U50D connected

The optional XDP-U50D lets you add some effects to the sound field of the currently selected source.

Selecting a surround menu

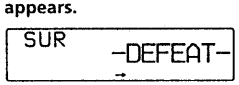
You can select a desired surround menu to best fit the source audio. The following menu can simulate different sound fields and enhance the sound so that you can feel as if you are in a live concert.

Surround menu

HALL	Concert hall
JAZZ	Jazz club
DISCO	Disco with thick walls
THEATER	Movie theatre
PARK	Big open space
LIVE	Live concert
OPERA	Opera house
CHURCH	Church/chapel with a lot of reverberation
STADIUM	Open-air concert in a stadium
CELLAR	Cellar with a lot of reverberation
DEFEAT	Normal sound without any DSP effects

1 Press (SOURCE) to select a source (radio, tape, CD or MD).

2 Press (SOUND) repeatedly until "SUR" appears.



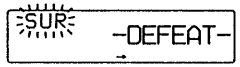
3 Press ⊕ or ⊖ to select the desired surround menu.
The surround menu appears in the order shown above.

After three seconds, the display goes back to the normal playback mode.

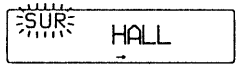
Adjusting the effect level

1 Press (SOURCE) to select a source (radio, tape, CD or MD).

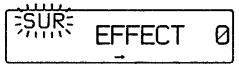
2 Press (SOUND) for two seconds.



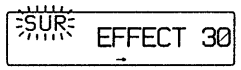
3 Press (SOUND) repeatedly until the desired surround menu appears.



4 Press ④ (→).



5 Press ⊕ or ⊖ to adjust the level.
You can adjust the level from 0 to 100%. Increase the level to enjoy more enhanced effects.



6 Press (SOUND) for two seconds.

Storing the surround effect onto the CDs

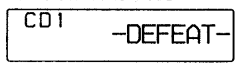
— Digital Signal Processor (DSP) Custom File (CD changer with custom file function)

Once you have registered the desired surround menu onto the discs, you can enjoy the same surround menu every time you play them. (Only when you have labeled the disc by the Custom File function.)

1 Press (LIST) for two seconds.

2 Press (LIST) until the surround menu appears.

DSP Custom File mode



3 Press ⊕ or ⊖ to select the desired surround menu.

4 Press (LIST) for two seconds.
When the effect setting complete, the display goes back to the normal playback mode.

Playing the disc with the stored surround menu

1 Press (SHIFT), then press ③ (PLAY MODE) repeatedly until "D.FILE" appears.

2 Press ④ (→) to select "D. FILE ON".
After five seconds, the display goes back to the normal playback mode.

To cancel to play the disc with stored surround menu, select "D. FILE OFF" in step 2 above.

Changing the stored surround effect

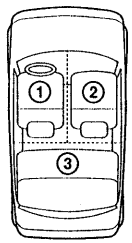
Play the disc whose surround mode you want to change, and follow the steps of "Storing the surround effect onto CDs".

Erasing the stored surround effect

Select "DEFEAT" in step 3 of "Storing the surround menu onto CDs".

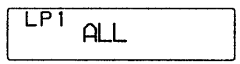
Selecting the listening position

You can set the time for the sound to reach the listeners from the speakers.
The unit can simulate a natural sound field so that you can feel as if you are in the centre of the sound field wherever you sit in the car.



Display window	Centre of sound field
LP1 ALL	Normal setting (① + ② + ③)
LP2 FRONT	Front part (① + ②)
LP3 FRONT R	Right front (②)
LP4 FRONT L	Left front (①)
LP5 REAR	Rear part (③)

1 Press (SOUND) momentarily until "LP1" appears.



2 Press ⊕ or ⊖ to select the desired listening position.
The listening positions appear in the order shown above.

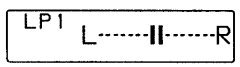
After three seconds, the display goes back to the normal playback mode.

Adjusting the listening position

1 Press (SOUND) for two seconds.

2 Press (SOUND) repeatedly until the desired listening position appears.

3 Press ④ (→).

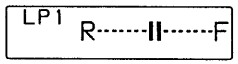


4 Press ⊕ or ⊖ to adjust the centre of the sound field to the left or right. Then set the centre of the sound field.

Centre moves to the R (right).

Centre moves to the L (left).

5 Press ④ (→).



6 Press ⊕ or ⊖ to adjust the centre of the sound field to the front or rear.

Centre moves to the F (front).

Centre moves to the R (rear).

7 Press SOUND for two seconds.
When the effect setting is complete, the normal playback mode display appears.

Adjusting the fader (FAD)

Normally, with the DSP mode on, the volume of the output sound from the rear speakers is lowered automatically to improve the efficiency of the listening position setting. If you want to raise the rear speaker volume, adjust the fader.

1 Follow steps 1 to 3 of "Selecting a surround menu" (page 21).

2 Press SOUND momentarily until "FAD" appears.

3 Press ⊕ or ⊖ to adjust the fader.

Increases front speaker volume

Decreases front speaker volume

After three seconds, the display goes back to the normal playback mode.

Adjusting the volume of the subwoofer(s)

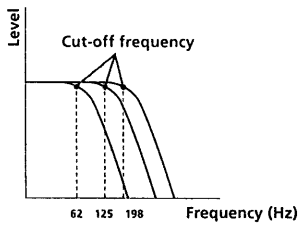
1 Press SOURCE to select a source (radio, tape, CD or MD).

2 Press SOUND repeatedly until "SUB" appears.

3 Press ⊕ or ⊖ to adjust the volume.
After three seconds, the display goes back to the normal playback mode.

Adjusting the frequency of the subwoofer(s)

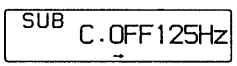
To match the characteristics of the connected subwoofer(s), you can cut the unwanted high and middle frequency signals entering the subwoofer(s). By setting the cut-off frequency (see the diagram below), the subwoofer(s) will output only low frequency signals so that you can get a clearer sound image.



1 Press SOURCE to select a source (radio, tape, CD or MD).

2 Press SOUND for two seconds.

3 Press SOUND repeatedly until "SUB" appears.



4 Press ⊕ or ⊖ to select the desired cut-off frequency.
The cut-off frequency in the display changes.

5 Press SOUND for two seconds.
When the frequency setting is complete, the display goes back to the normal playback mode.

EN EN
DSP

Adjusting the volume of the bass and treble

You can adjust the volume of the bass and treble to best fit the acoustic characteristics inside your car.

1 Press SOURCE to select a source (radio, tape, CD or MD).

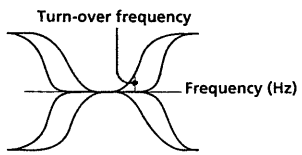
2 Press SOUND repeatedly until "BAS" or "TRE" appears.

3 Press ⊕ or ⊖ to adjust the volume.

After three seconds, the display goes back to the normal playback mode.

Adjusting the turn-over frequency

You can adjust the bass and treble turn-over frequencies.

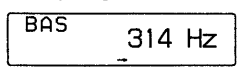


1 Press SOURCE to select a source (radio, tape, CD or MD).

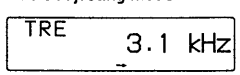
2 Press SOUND for two seconds.

3 Press SOUND repeatedly until "BAS" or "TRE" appears.

Bass adjusting mode



Treble adjusting mode



4 Press ⊕ or ⊖ to select the turn-over frequency.
The turn-over frequencies change as follows:

Bass:
198 Hz → 250 Hz → 314 Hz* → 396 Hz

Treble:
2.0 kHz → 3.1 kHz* → 4.0 kHz → 5.0 kHz

** Factory-set frequency*

5 Press SOUND for two seconds.
The display goes back to the normal playback mode.

Listening to each programme source in its registered surround menu

—Source Sound Memory (SSM)

You can listen to the same source always in the same surround menu even after changing the programme source or turning the unit on and off again.

Changing the line output level

1 Press SHIFT, then press ② (SET UP) until "L.OUT" appears.

2 Press ④ (→) to select the desired setting (–10 dB or –16 dB).

Connections

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Connect the power connecting cord ⑦ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all ground wires to a common ground point.**

If your car has no accessory position on the ignition key switch — POWER SELECT switch

The illumination on the front panel is factory-set to be turned on even when the unit is not being played. However, this setting may cause some car battery wear **if your car has no accessory position on the ignition key switch.** To avoid this battery wear, **set the POWER SELECT switch located on the bottom of the unit to the ❽ position, then press the reset button.** The illumination is reset to stay off while the unit is not being played.

Note

The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the ❽ position.

When a digital pre-amplifier etc. is connected

— LINE-OUT/IN SELECT switch

Set the LINE-OUT/IN SELECT switch, which is on the underside of the unit, to position ❷, so that the LINE-OUT/IN terminal will function as LINE-IN terminal.
With the switch in position ①, the terminal will work as LINE-OUT terminal.

When you change the position of the switch, be sure to press one of the reset buttons after the connections are completed.

Reset button

When the installation and connections are over, be sure to press the reset button with a ballpoint pen etc.

Notes on the control leads

- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation), AF (Alternative Frequency), the TA (Traffic Announcement) or TIR (Traffic Information Replay) function.*
- *A power aerial without relay box cannot be used with this unit.*

Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Warning

If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord ⑦ may damage the aerial.

Connexions

Précautions

- Cet appareil est conçu pour fonctionner sur courant continu de 12 V avec masse négative.
- Branchez le cordon d'alimentation ⑦ sur l'appareil et les haut-parleurs avant de le brancher sur le connecteur d'alimentation auxiliaire.
- **Rassembler tous les fils de terre en un point de masse commun.**

Si l'appareil est utilisé dans une voiture dont la clé de contact n'a pas de position accessoires

— Interrupteur POWER SELECT

L'éclairage de la façade est réglé en usine de manière à s'allumer même quand l'appareil ne fonctionne pas. Cependant, ce réglage risque d'épuiser la batterie **si l'appareil est utilisé dans une voiture dont la clé de contact ne possède pas de position accessoires.** Pour éviter d'épuiser la batterie, régler l'interrupteur **POWER SELECT sur le socle de l'appareil sur la position ❽, puis appuyer sur la touche de réinitialisation.** L'éclairage est réglé pour rester éteint quand l'appareil n'est pas utilisé.

Remarque

Quand l'interrupteur POWER SELECT est réglé sur la position ❽, l'avertisseur du panneau avant ne fonctionne pas

Quand un préamplificateur numérique, entre autres, est raccordé

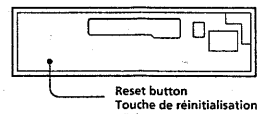
— Commutateur LINE OUT/IN SELECT

Réglez le sélecteur LINE-OUT/IN SELECT, qui se trouve sous l'appareil, sur la position ❷, pour que la borne LINE-OUT/IN fonctionne comme borne LINE-IN.
Lorsque le commutateur se trouve sur la position ①, la borne sert de borne LINE OUT.

Si vous changez la position de l'interrupteur, n'oubliez pas d'appuyer sur une des touches de réinitialisation après avoir terminé tous les raccordements.

Touche de réinitialisation

Quand l'installation et les connexions sont terminées, appuyer sur la touche de réinitialisation avec un stylo bille ou un objet pointu.



Reset button
Touche de réinitialisation
Rücksetztaste
Pulsante di azzeramento

Remarques sur les fils de contrôle

- *Le fil de contrôle (bleu) de l'antenne électrique fournit un courant continu de +12 V quand le tuner est allumé ou quand la fonction ATA (Activation automatique du tuner), AF (Fréquences alternatives), TA (informations routières) ou TIR (Répétition des informations routières) est mise en service.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Connexion pour la conservation de la mémoire

Lorsque le fil d'entrée d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur la connexion des haut-parleurs

- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Ne pas connecter d'enceintes acoustiques actives (avec amplificateurs intégrés) aux bornes d'enceinte de cet appareil, pour éviter d'endommager les enceintes. Veiller à raccorder des enceintes passives.*

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni ⑦ risque d'endommager l'antenne.

Anschluß

Vorsicht

- Dieses Gerät ist ausschließlich für eine negativ geerdete 12-V-Gleichstromversorgung bestimmt.
- Verbinden Sie das Netzverbindungskabel ⑦ mit dem Gerät und den Lautsprechern, bevor Sie es mit dem Hilfsstromanschluß verbinden.
- **Schließen Sie alle Erdungskabel an einen gemeinsamen Massepunkt an.**

Wenn das Zündschloß Ihres Wagens keine Position I bzw. ACC besitzt — POWER SELECT-Schalter

Das Gerät ist werkseitig so voreingestellt, daß das Bedienfeld auch dann beleuchtet ist, wenn das Gerät nicht betrieben wird. Besitzt das Zündschloß Ihres Fahrzeugs **keine Position I bzw. ACC, so ist die Beleuchtung ständig eingeschaltet** und entzieht der Batterie Strom. Stellen Sie in einem solchen Fall **den POWER SELECT-Schalter an der Unterseite des Geräts auf Position ❽, und drücken Sie dann die Rücksetztaste.** Bei ausgeschaltetem Gerät ist das Bedienfeld dann nicht mehr beleuchtet.

Hinweis

Der Warnton für die Frontplatte ertönt nicht, wenn der POWER SELECT-Schalter auf Position ❽ gestellt ist.

Bei Anschluß eines digitalen Vorverstärkers usw.

— Schalter LINE-OUT/IN SELECT

Stellen Sie den an der Geräteunterseite befindlichen LINE-OUT/IN SELECT -Schalter auf ❷. Die LINE-OUT/IN -Buchse arbeitet dann als Eingang (LINE-IN).
Befindet sich der Schalter in Position ①, arbeitet der Anschluß als Anschluß LINE OUT.

Nach einer Umstellung des Schalters drücken Sie (bei vollständig angeschlossenem Gerät) die Rücksetztaste.

Rücksetztaste

Nach der Installation und dem Anschluß muß die Rücksetztaste mit einem Kugelschreiber o.ä. gedrückt werden.

Hinweise zu den Steuerleitungen

- *Die (blaue) Motorantennen-Steuerleitung liefert eine Gleichspannung von +12 V, wenn der Tuner eingeschaltet, die ATA-Funktion (Automatic Tuner Activation), die AF-Funktion (Alternative Frequency) die TA-Funktion (Traffic Announcement) oder TIR (Traffic Information Replay) aktiviert ist.*
- *Es kann nur eine Motorantenne mit Relaisbox angeschlossen werden.*

Stromversorgung des Speichers

Wenn das gelbe Stromversorgungskabel angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluß

- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis, und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da diese sonst beschädigt werden können.*

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit Hilfe des mitgelieferten Netzverbindungskabels ⑦ die Antenne beschädigt werden.

Collegamenti

Attenzione

- Questo apparecchio è stato progettato per l'uso solo a 12 V CC con massa negativa.
- Collegare il cavo dell'alimentazione ⑦ all'apparecchio e bis ai diffusori prima di collegarlo al connettore di alimentazione ausiliario.
- **Portare tutti i cavi di massa a un punto di massa comune.**

Quando si usa l'apparecchio in un'auto priva di posizione accessoria per la chiavetta di accensione

— Interruttore POWER SELECT

L'illuminazione del pannello anteriore è stata predisposta in fabbrica per l'attivazione anche quando non si usa l'apparecchio. Tuttavia questa regolazione può scaricare la batteria **se la chiavetta di accensione è priva della posizione accessoria.** Per evitare ciò, **regolare su ❽ l'interruttore POWER SELECT situato alla base dell'apparecchio e quindi premere il tasto di azzeramento.** L'illuminazione rimane così spenta finché l'apparecchio non viene utilizzato.

Nota

La suoneria di avvertimento del pannello anteriore non funziona quando l'interruttore POWER SELECT è in posizione ❽.

Quando è collegato un preamplificatore digitale, ecc.

— Interruttore LINE-OUT/IN SELECT

Regolare l'interruttore LINE-OUT/IN SELECT, che si trova sul fondo dell'apparecchio, sulla posizione ❷, in modo che il terminale LINE-OUT/IN funzioni come terminale LINE-IN.
Con l'interruttore su ①, il cavo terminale fungerà da cavo terminale LINE-OUT.

Quando si cambia la posizione dell'interruttore, assicurarsi di premere uno dei pulsanti di azzeramento dopo aver completato i collegamenti.

Pulsante di azzeramento

Dopo avere terminato l'installazione e i collegamenti, assicurarsi di premere il pulsante di azzeramento con la punta di una penna a sfera o altro oggetto simile.

Note sui cavi di collegamento

- *Il cavo di controllo antenna automatica (blu) fornisce +12 V CC quando si accende il sintonizzatore o quando si attiva la funzione ATA (attivazione automatica sintonizzatore), la funzione AF (frequenza alternativa) o TA (notiziari sul traffico) o TIR (ripetizione notiziari sul traffico).*
- *Non è possibile usare un'antenna automatica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria

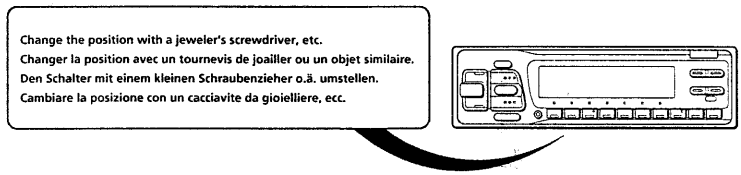
Quando il cavo di ingresso alimentazione giallo è collegato, il circuito della memoria viene alimentato in continuazione anche quando la chiavetta dell'accensione è sulla posizione spento.

Note sul collegamento dei diffusori

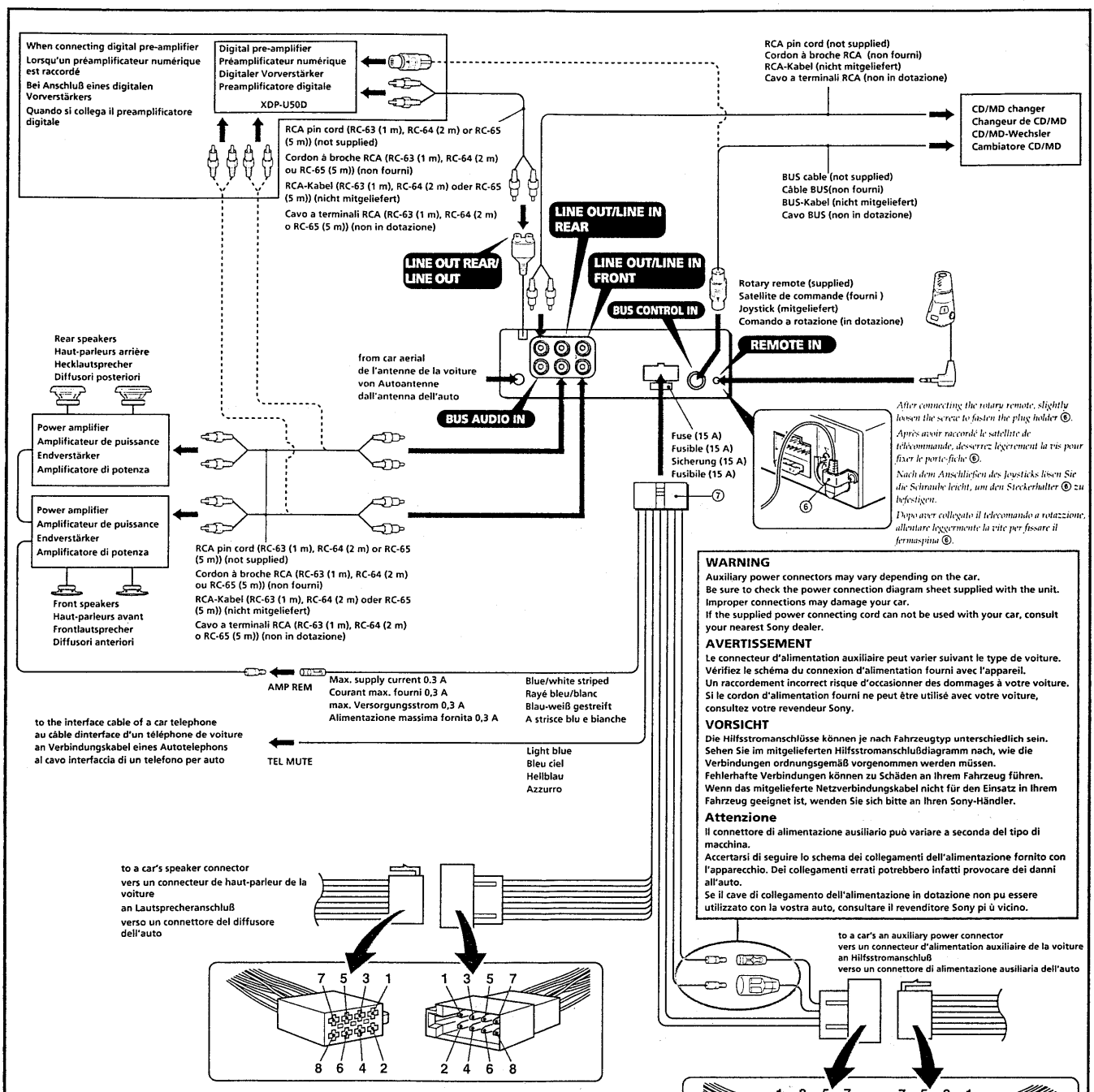
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, onde evitare di danneggiarli.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare i diffusori in parallelo.*
- *Non collegare alcun diffusore attivo (con amplificatore incorporato) ai terminali diffusori dell'apparecchio perché questo può danneggiare i diffusori attivi. Assicurarsi di collegare dei diffusori passivi.*

Avvertenza

Se l'antenna elettrica è priva di relè, potrebbe danneggiarsi se il collegamento dell'apparecchio viene effettuato utilizzando il cavo di alimentazione in dotazione ⑦.


Change the position with a jeweler's screwdriver, etc.
Changer la position avec un tournevis de joaillier ou un objet similaire.
Den Schalter mit einem kleinen Schraubenzieher o.ä. umstellen.
Cambiare la posizione con un cacciavite da gioielliere, ecc.

Connections of example — Connexions de l'exemple — Anschlußbeispiel — Esempi di Collegamento


When connecting digital pre-amplifier
Lorsqu'un préamplificateur numérique est raccordé
Bei Anschluß eines digitalen Vorverstärkers
Quando si collega il preamplificatore digitale
Digital pre-amplifier
Préamplificateur numérique
Digitaler Vorverstärker
Preamplificatore digitale
XDP-U50D
RCA pin cord (RC-63 (1 m), RC-64 (2 m) or RC-65 (5 m)) (not supplied)
Cordon à broche RCA (RC-63 (1 m), RC-64 (2 m) ou RC-65 (5 m)) (non fourni)
RCA-Kabel (RC-63 (1 m), RC-64 (2 m) oder RC-65 (5 m)) (nicht mitgeliefert)
Cavo a terminali RCA (RC-63 (1 m), RC-64 (2 m) o RC-65 (5 m)) (non in dotazione)
RCA pin cord (not supplied)
Cordon à broche RCA (non fourni)
RCA-Kabel (nicht mitgeliefert)
Cavo a terminali RCA (non in dotazione)
CD/MD changer
Changeur de CD/MD
CD/MD-Wechsler
Cambiatore CD/MD
BUS cable (not supplied)
Câble BUS(non fourni)
BUS-Kabel (nicht mitgeliefert)
Cavo BUS (non in dotazione)
LINE OUT/LINE IN REAR
LINE OUT REAR/ LINE OUT
LINE OUT/LINE IN FRONT
BUS CONTROL IN
REMOTE IN
BUS AUDIO IN
Rotary remote (supplied)
Satellite de commande (fourni)
Joystick (mitgeliefert)
Comando a rotazione (in dotazione)
from car aerial
de l'antenne de la voiture
von Autoantenne
dall'antenna dell'auto
Rear speakers
Haut-parleurs arrière
Hecklautsprecher
Diffusori posteriori
Power amplifier
Amplificateur de puissance
Endverstärker
Amplificatore di potenza
Power amplifier
Amplificateur de puissance
Endverstärker
Amplificatore di potenza
RCA pin cord (RC-63 (1 m), RC-64 (2 m) or RC-65 (5 m)) (not supplied)
Cordon à broche RCA (RC-63 (1 m), RC-64 (2 m) ou RC-65 (5 m)) (non fourni)
RCA-Kabel (RC-63 (1 m), RC-64 (2 m) oder RC-65 (5 m)) (nicht mitgeliefert)
Cavo a terminali RCA (RC-63 (1 m), RC-64 (2 m) o RC-65 (5 m)) (non in dotazione)
Front speakers
Haut-parleurs avant
Frontlautsprecher
Diffusori anteriori
Fuse (15 A)
Fusible (15 A)
Sicherung (15 A)
Fusibile (15 A)
After connecting the rotary remote, slightly loosen the screw to fasten the plug holder ⑥.
Après avoir raccordé le satellite de télécommande, desserrez légèrement la vis pour fixer le porte-fiche ⑥.
Nach dem Anschließen des Joysticks lösen Sie die Schraube leicht, um den Steckerhalter ⑥ zu befestigen.
Dopo aver collegato il telecomando a rotazione, allentare leggermente la vite per fissare il fermaspina ⑥.
AMP REM
Max. supply current 0,3 A
Courant max. fourni 0,3 A
max. Versorgungsstrom 0,3 A
Alimentazione massima fornita 0,3 A
Blue/white striped
Rayé bleu/blanc
Blau-weiß gestreift
A strisce blu e bianche
to the interface cable of a car telephone
au câble dinterface d'un téléphone de voiture
an Verbindungskabel eines Autotelephons
al cavo interfaccia di un telefono per auto
TEL MUTE
Light blue
Bleu ciel
Hellblau
Azzurro
to a car's speaker connector
vers un connecteur de haut-parleur de la voiture
an Lautsprecheranschluß
verso un connettore del diffusore dell'auto
7 5 3 1
8 6 4 2
1 3 5 7
2 4 6 8
to a car's an auxiliary power connector
vers un connecteur d'alimentation auxiliaire de la voiture
an Hilfsstromanschluß
verso un connettore di alimentazione ausiliaria dell'auto
1 3 5 7
2 4 6 8
7 5 3 1
8 6 4 2

WARNING
Auxiliary power connectors may vary depending on the car.
Be sure to check the power connection diagram sheet supplied with the unit.
Improper connections may damage your car.
If the supplied power connecting cord can not be used with your car, consult your nearest Sony dealer.

AVERTISSEMENT
Le connecteur d'alimentation auxiliaire peut varier suivant le type de voiture.
Vérifiez le schéma du connexion d'alimentation fourni avec l'appareil.
Un raccordement incorrect risque d'occasionner des dommages à votre voiture.
Si le cordon d'alimentation fourni ne peut être utilisé avec votre voiture, consultez votre revendeur Sony.

VORSICHT
Die Hilfsstromanschlüsse können je nach Fahrzeugtyp unterschiedlich sein.
Sehen Sie im mitgelieferten Hilfsstromanschlußdiagramm nach, wie die Verbindungen ordnungsgemäß vorgenommen werden müssen.
Fehlerhafte Verbindungen können zu Schäden an Ihrem Fahrzeug führen.
Wenn das mitgelieferte Netzverbindungskabel nicht für den Einsatz in Ihrem Fahrzeug geeignet ist, wenden Sie sich bitte an Ihren Sony-Händler.

Attenzione
Il connettore di alimentazione ausiliario può variare a seconda del tipo di macchina.
Accertarsi di seguire lo schema dei collegamenti dell'alimentazione fornito con l'apparecchio. Dei collegamenti errati potrebbero infatti provocare dei danni all'auto.
Se il cave di collegamento dell'alimentazione in dotazione non pu ù vicino.

Pin Broche Stift Pin	Colour Couleur Farbe Colore	Function Fonction Funktion Funzione	Pin Broche Stift Pin	Colour Couleur Farbe Colore	Function Fonction Funktion Funzione
1	Purple Mauve Violett Viola	+; Speaker, Rear, Right +; haut-parleur, arrière, droit +; Lautsprecher hinten rechts Diffusore, posteriore, destro	5	White Blanc Weiß Bianco	+; Speaker, Front, Left +; haut-parleur, avant, gauche +; Lautsprecher vorne links Diffusore, anteriore, sinistro
2		–; Speaker, Rear, Right –; haut-parleur, arrière, droit –; Lautsprecher hinten rechts Diffusore, posteriore, destro	6		–; Speaker, Front, Left –; haut-parleur, avant, gauche –; Lautsprecher vorne links Diffusore, anteriore, sinistro
3	Gray Gris Grau Grigio	+; Speaker, Front, Right +; haut-parleur, avant, droit +; Lautsprecher vorne rechts Diffusore, anteriore, destro	7	Green Vert Grün Verde	+; Speaker, Rear, Left +; haut-parleur, arrière, gauche +; Lautsprecher hinten links Diffusore, posteriore, sinistro
4		–; Speaker, Front, Right –; haut-parleur, avant, droit –; Lautsprecher vorne rechts Diffusore, anteriore, destro	8		–; Speaker, Rear, Left –; haut-parleur, arrière, gauche –; Lautsprecher hinten links Diffusore, posteriore, sinistro

Negative polarity positions 2, 4, 6, and 8 have striped cords.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
An den negativ gepolten Positionen (2, 4, 6 und 8) befinden sich gestreifte Kabel.
Le posizioni a polatità negativa 2, 4, 6 e 8 hanno cavi a strisce.

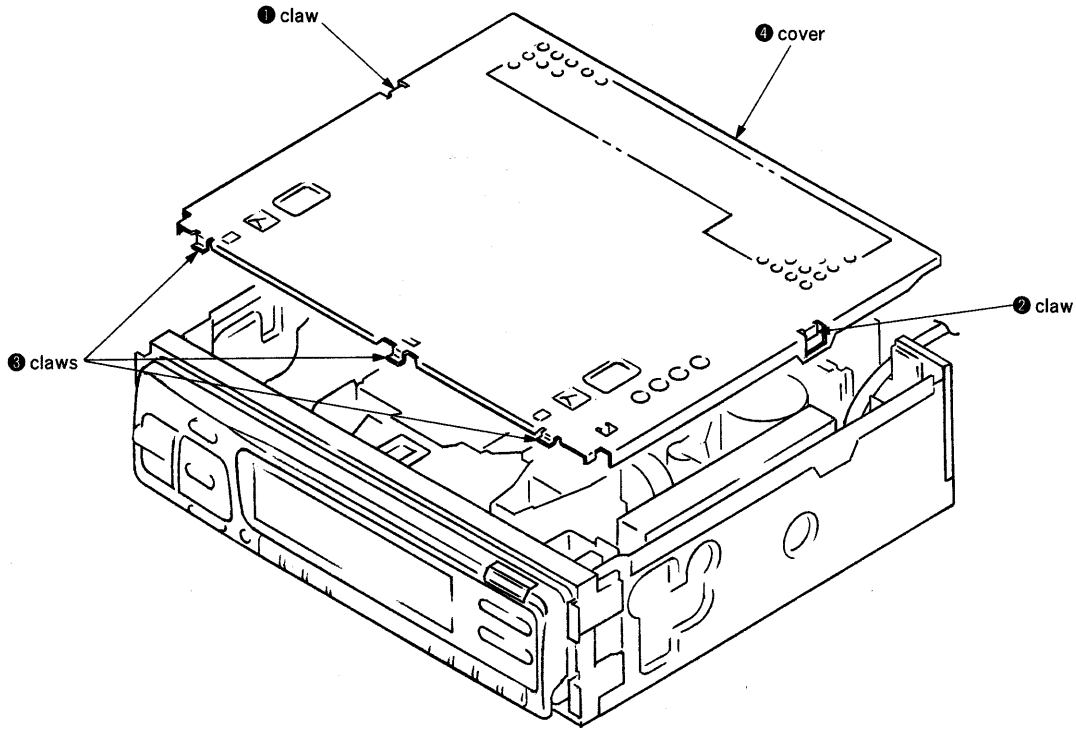
Pin Broche Stift Pin	Colour Couleur Farbe Colore	Function Fonction Funktion Funzione	Pin Broche Stift Pin	Colour Couleur Farbe Colore	Function Fonction Funktion Funzione
4	Yellow Jaune Gelb Giallo	continuous power supply alimentation continue permanente Stromversorgung alimentazione continua	7	Red Rouge Rot Rosso	switched power supply alimentation commutée geschaltete Stromversorgung alimentazione commutata
5	Blue Bleu Blau Blu	power aerial control antenne électrique Motorantennen-Steuerung antenna elettrica	8	Black Noir Schwarz Nero	ground masse Masse massa

Positions 1, 2, 3 and 6 do not have pins.
Les positions 1, 2, 3 et 6 ne comportent pas de broche.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Le posizioni 1, 2, 3 e 6 non hanno pin.

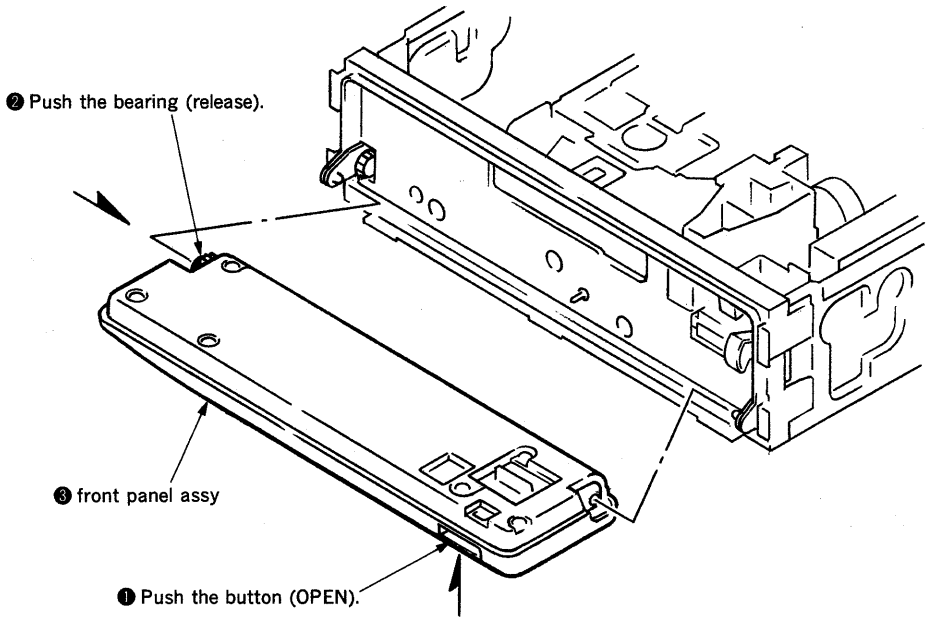
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

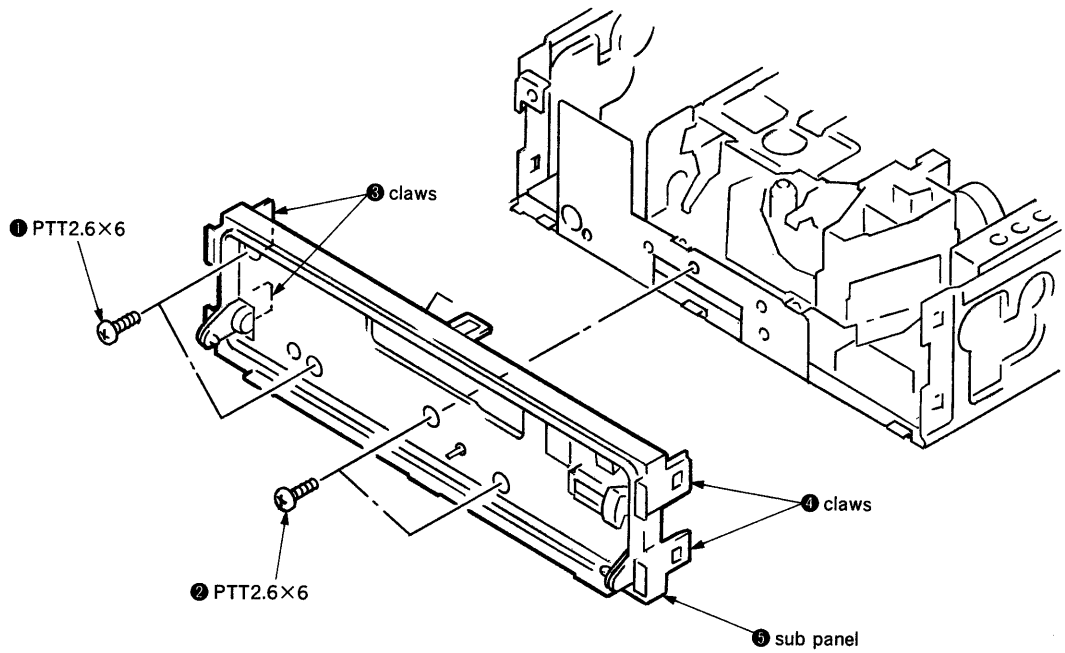
2-1. COVER



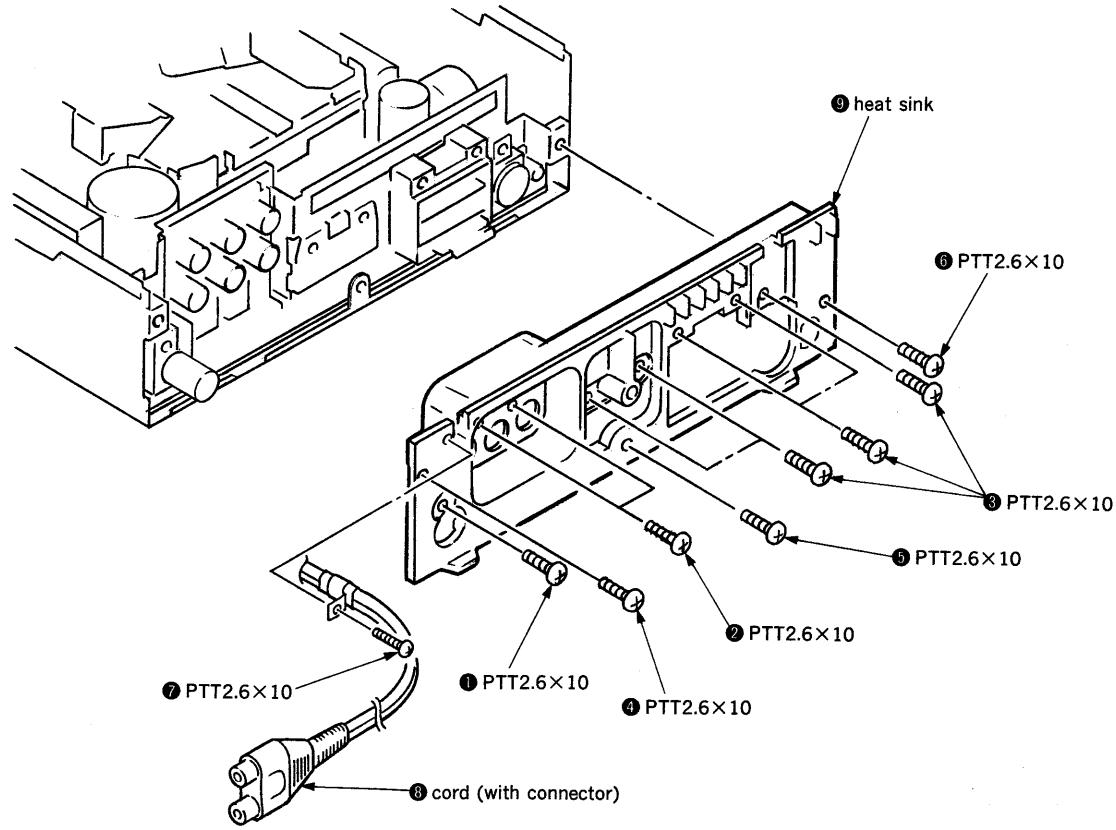
2-2. FRONT PANEL ASSY



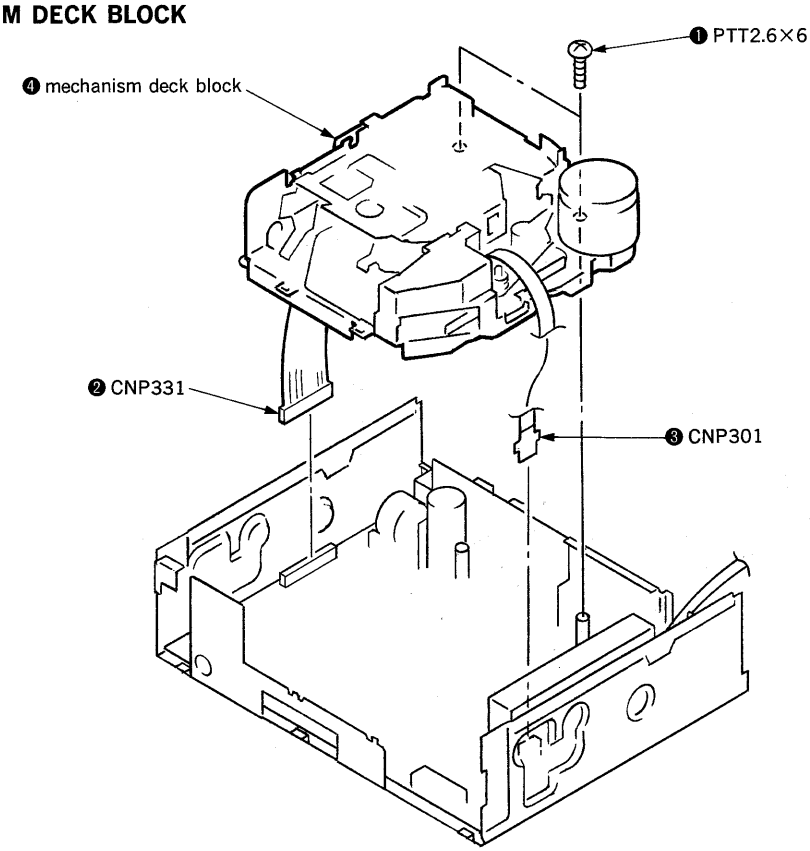
2-3. SUB PANEL



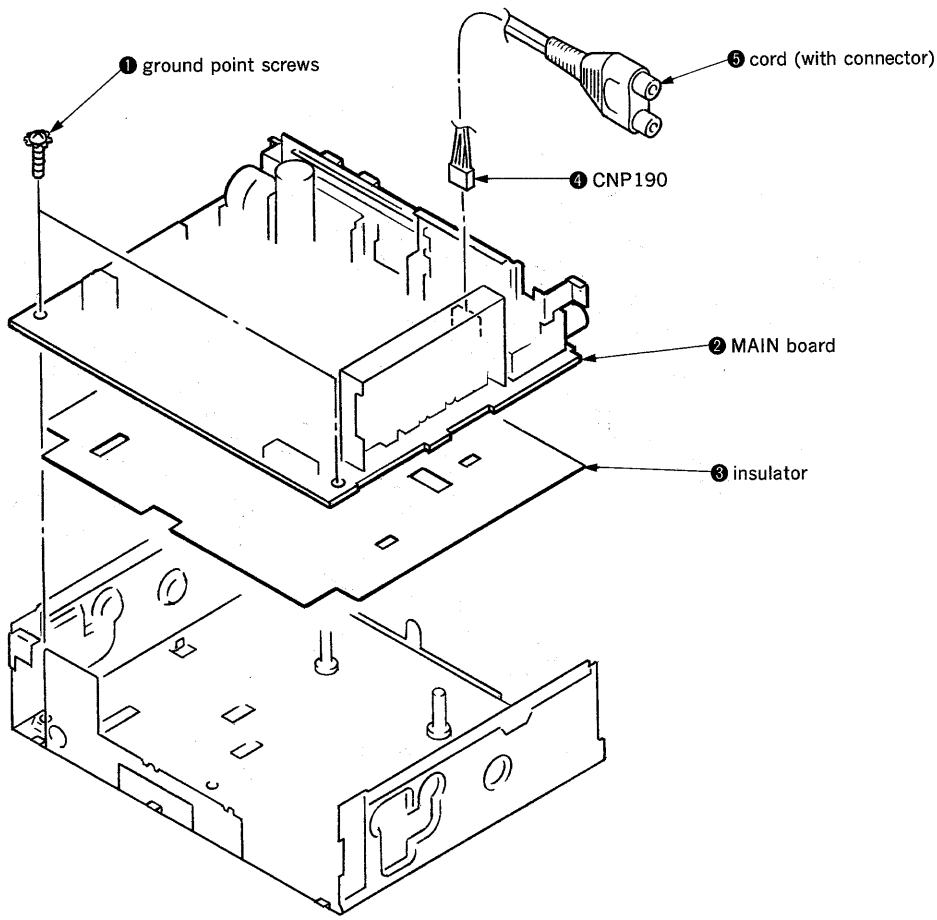
2-4. HEAT SINK



2-5. MECHANISM DECK BLOCK



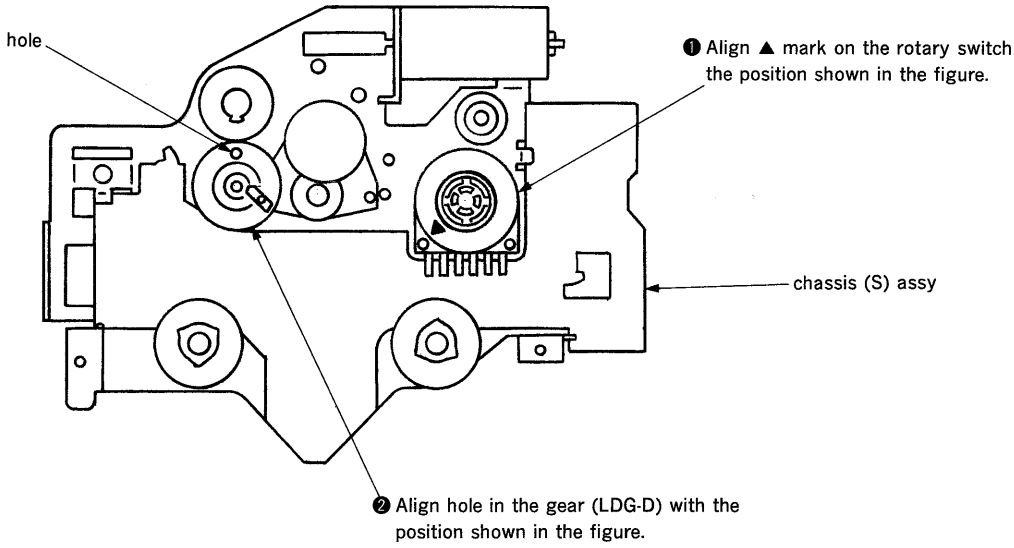
2-6. MAIN BOARD



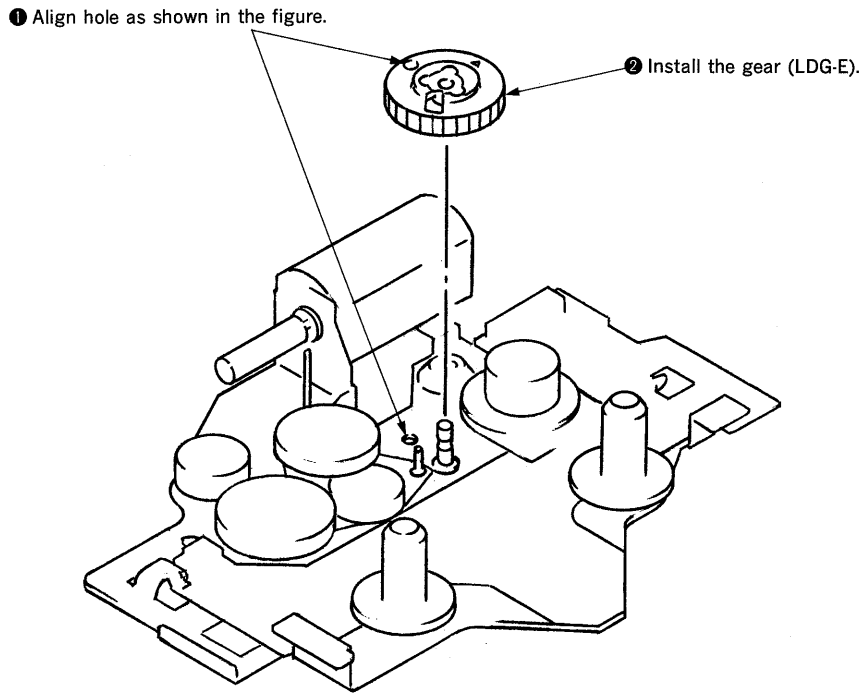
SECTION 3
ASSEMBLY OF MECHANISM DECK

Note : Follow the assembly procedure in the numerical order given.

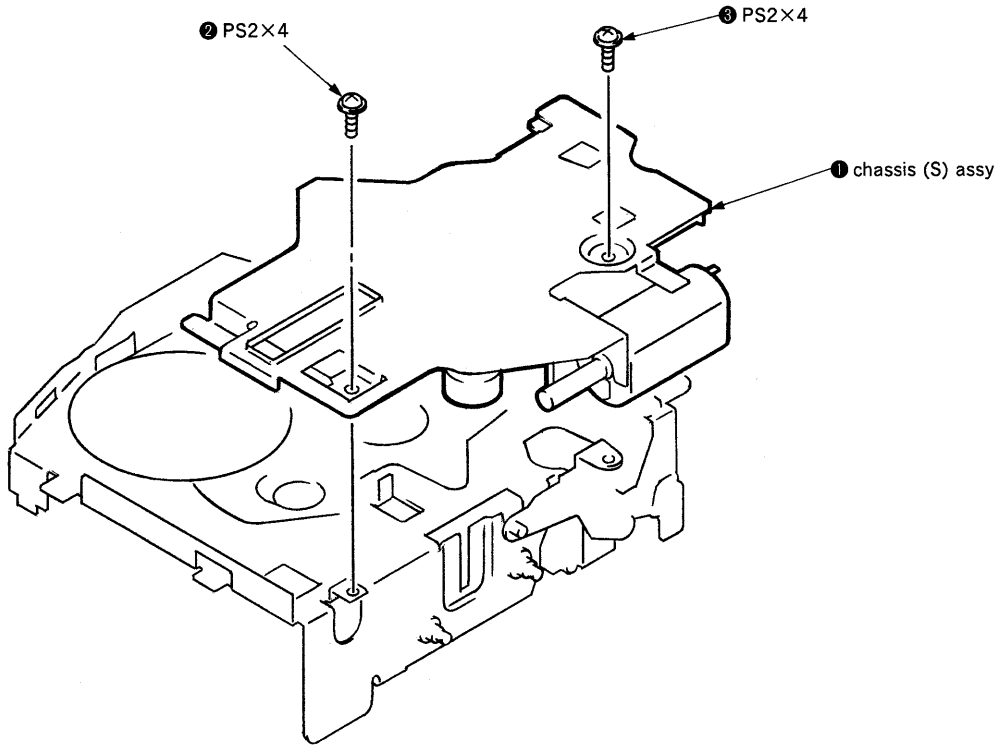
3-1. ALIGNMENT OF ROTARY SWITCH


hole
❶ Align ▲ mark on the rotary switch the position shown in the figure.
chassis (S) assy
❷ Align hole in the gear (LDG-D) with the position shown in the figure.

3-2. GEAR (LDG-E)



3-3. CHASSIS (S) ASSY



3-4. LEVER (MODE)

1) Align ▲ mark on the rotary switch with hole in the lever (mode). (See Fig. 1)
2) Fit on positions Ⓐ, Ⓑ and Ⓒ and install the lever (mode).

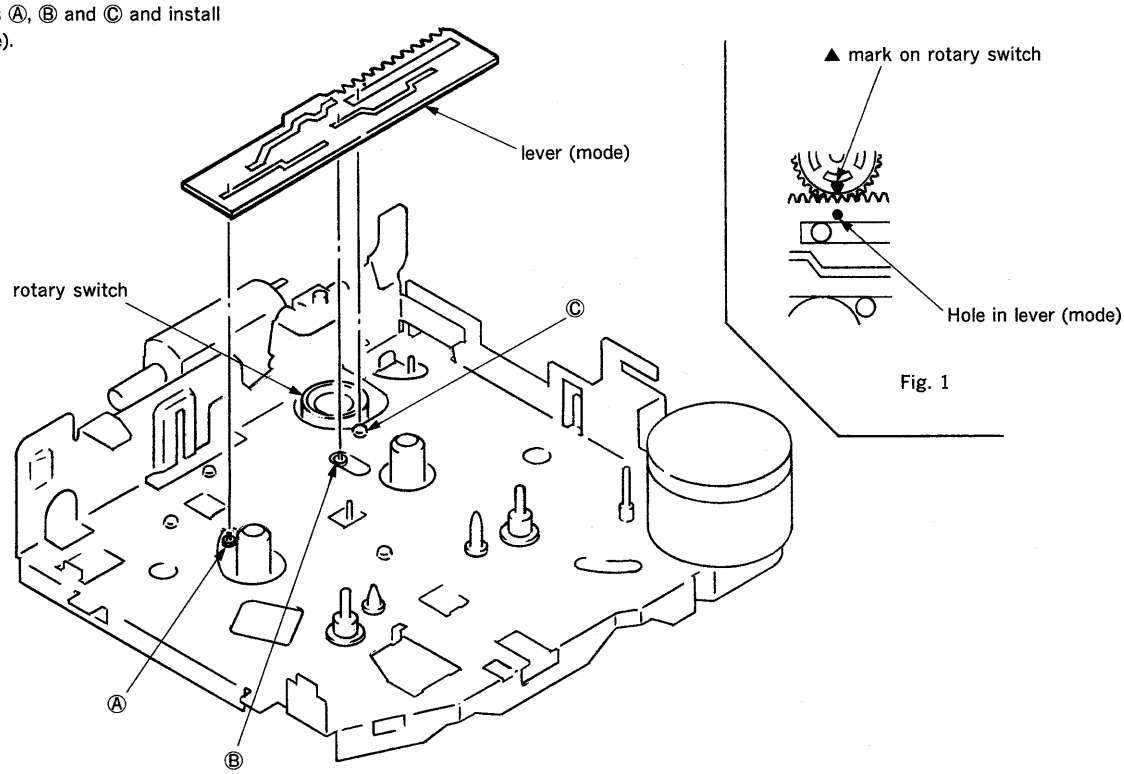
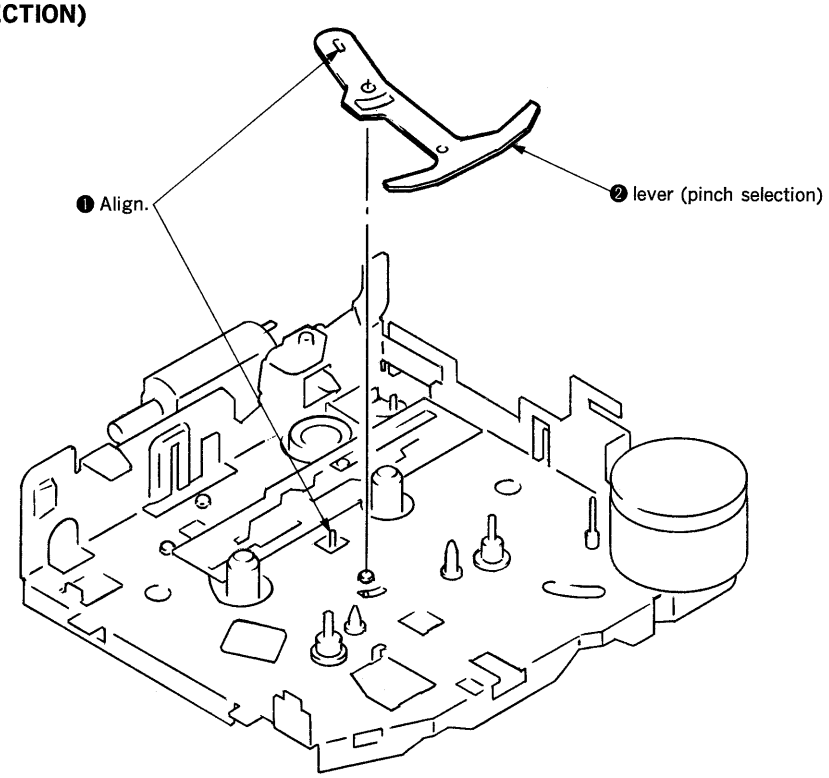
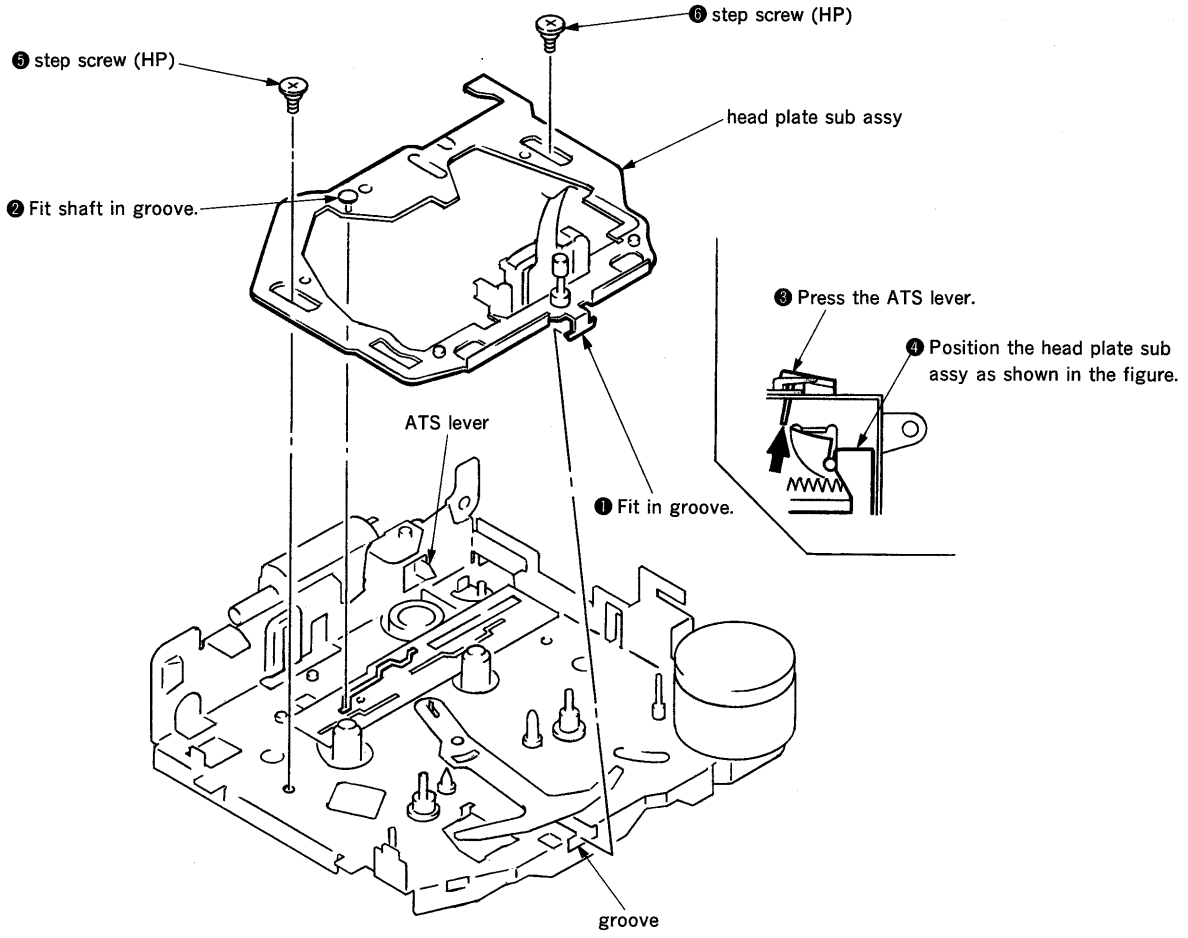


Fig. 1

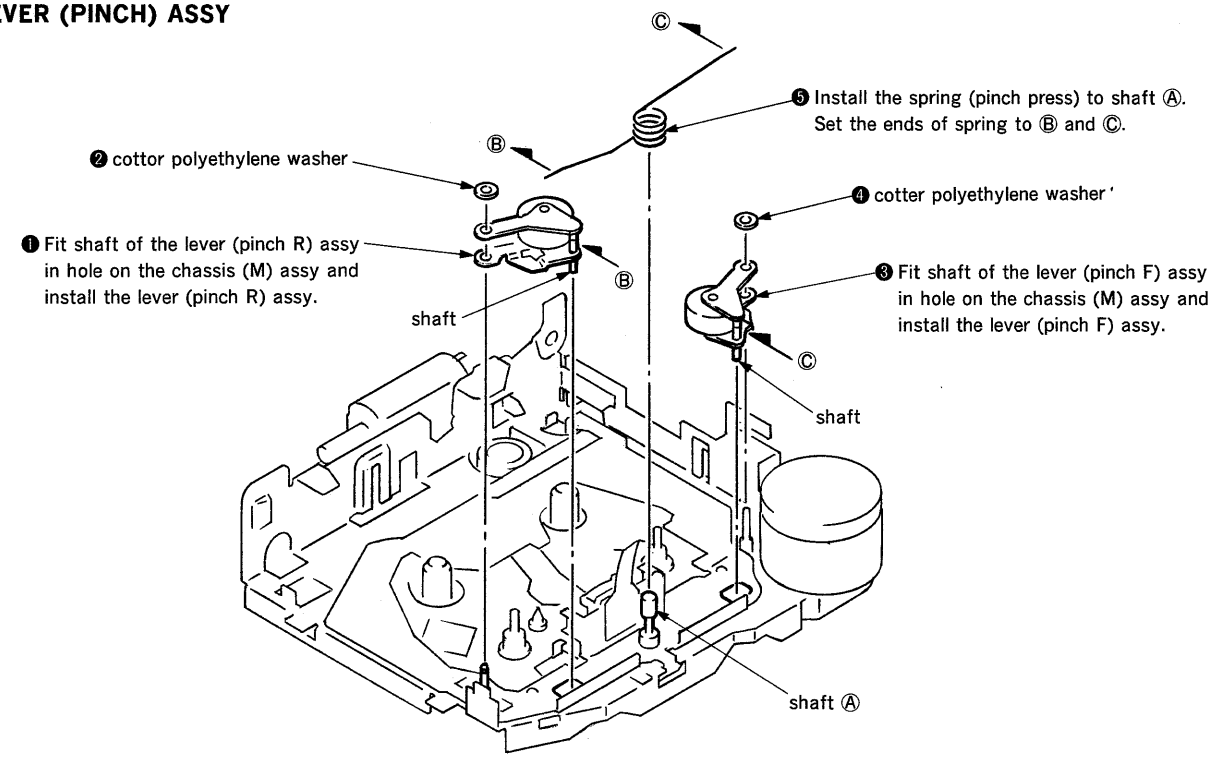
3-5. LEVER (PINCH SELECTION)



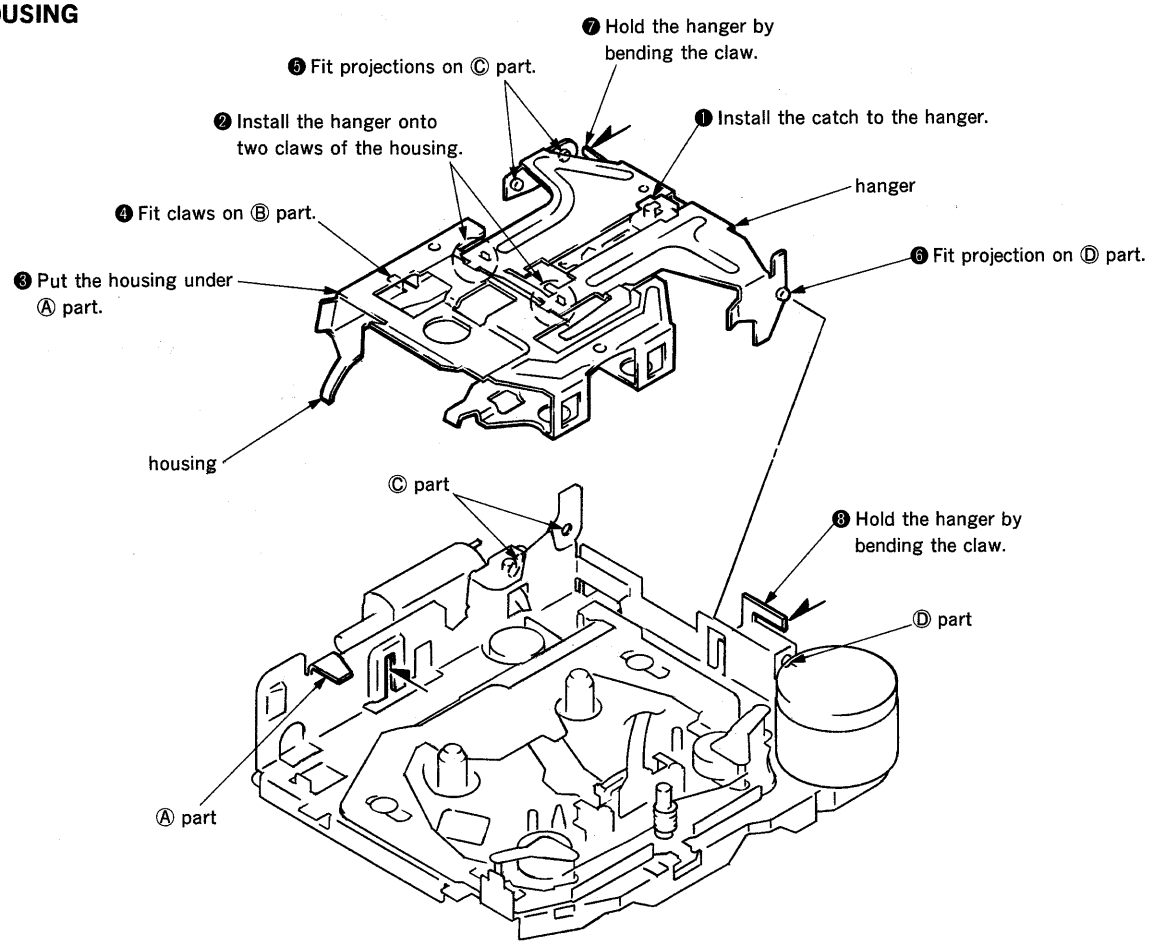
3-6. HEAD PLATE ASSY


❻ step screw (HP)
❺ step screw (HP)
head plate sub assy
❷ Fit shaft in groove.
❸ Press the ATS lever.
❹ Position the head plate sub assy as shown in the figure.
ATS lever
❶ Fit in groove.
groove

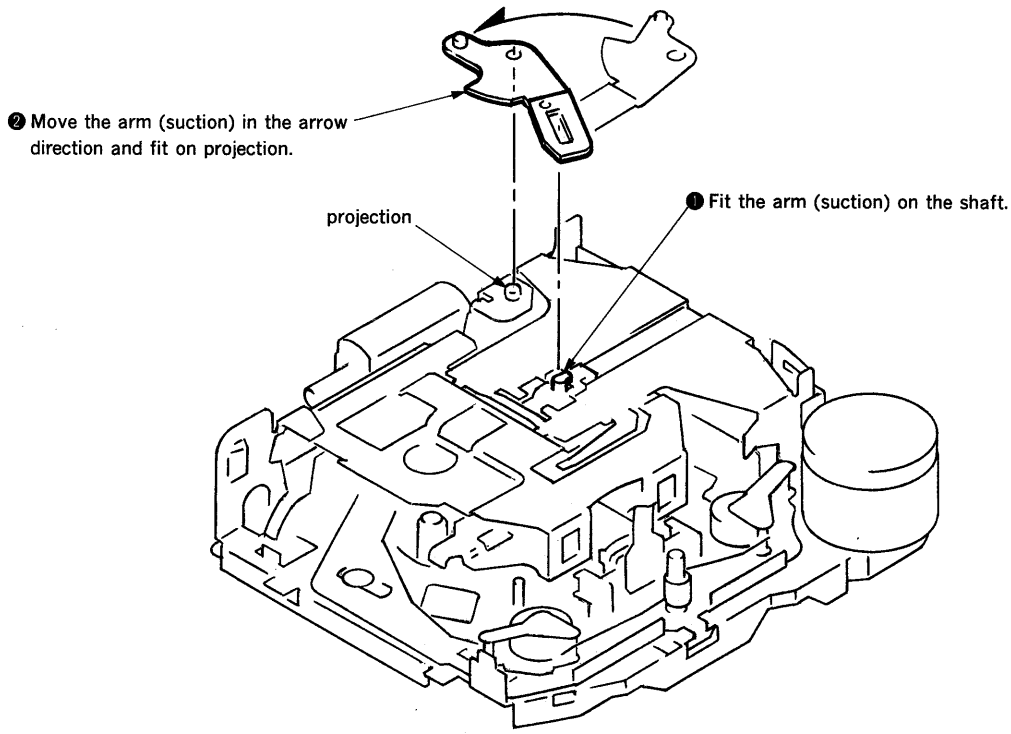
3-7. LEVER (PINCH) ASSY


Ⓒ
❺ Install the spring (pinch press) to shaft Ⓐ.
Set the ends of spring to Ⓑ and Ⓒ.
Ⓑ
❷ cottor polyethylene washer
❹ cotter polyethylene washer '
❶ Fit shaft of the lever (pinch R) assy
in hole on the chassis (M) assy and
install the lever (pinch R) assy.
Ⓑ
❸ Fit shaft of the lever (pinch F) assy
in hole on the chassis (M) assy and
install the lever (pinch F) assy.
shaft
Ⓒ
shaft
shaft Ⓐ

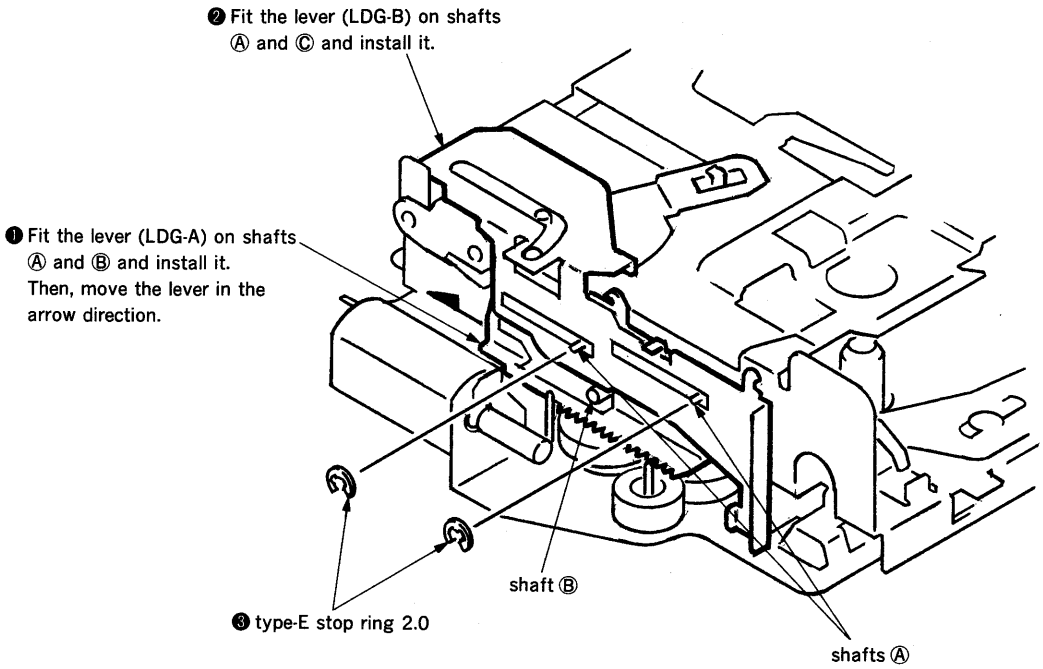
3-8. HOUSING



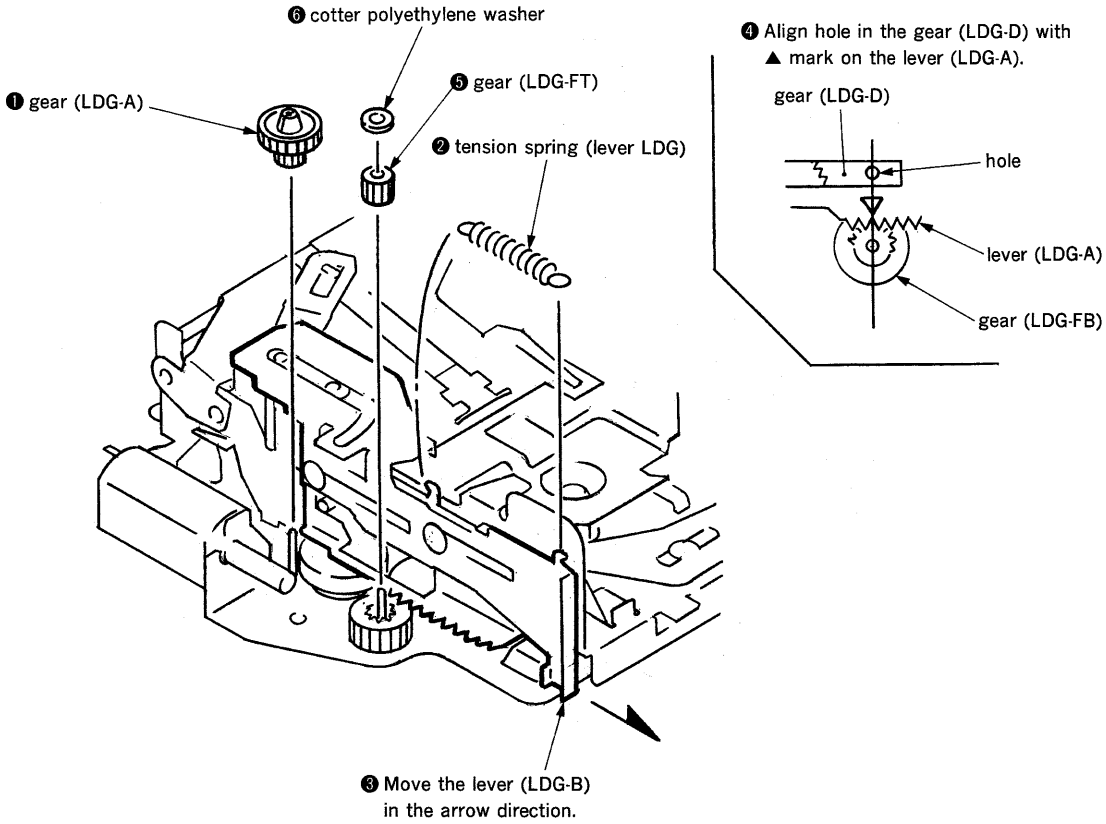
3-9. ARM (SUCTION)



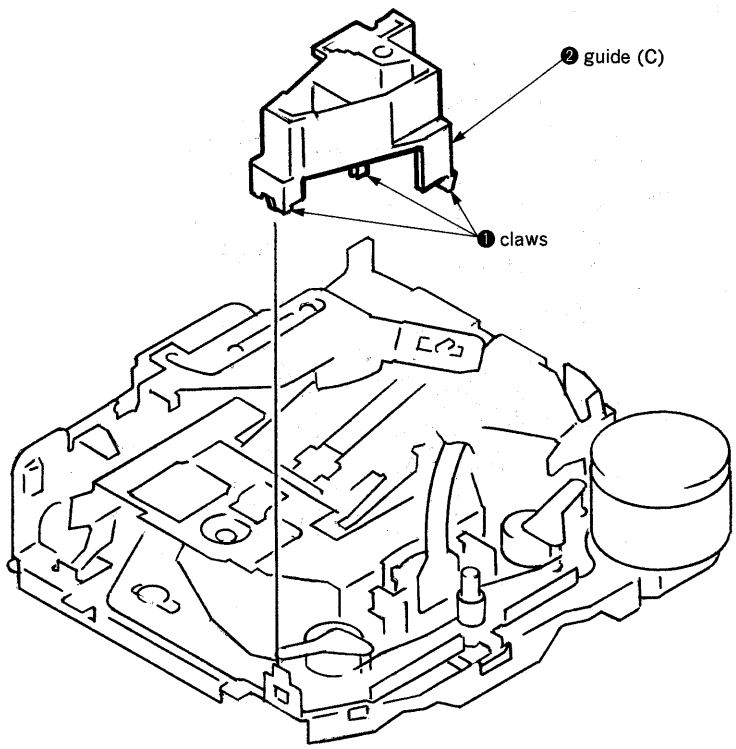
3-10. LEVER (LDG-B)


❷ Fit the lever (LDG-B) on shafts Ⓐ and Ⓒ and install it.
❶ Fit the lever (LDG-A) on shafts Ⓐ and Ⓑ and install it. Then, move the lever in the arrow direction.
shaft Ⓑ
❸ type-E stop ring 2.0
shafts Ⓐ

3-11. GEAR (LDG-FT)


❻ cotter polyethylene washer
❶ gear (LDG-A)
❺ gear (LDG-FT)
❷ tension spring (lever LDG)
❸ Move the lever (LDG-B) in the arrow direction.
❹ Align hole in the gear (LDG-D) with ▲ mark on the lever (LDG-A).
gear (LDG-D)
hole
lever (LDG-A)
gear (LDG-FB)

3-12. GUIDE (C)



SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment:
   PB head　　Pinch roller
   Idler　　Rubber belt
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After the adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4V).

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	35−65g•cm (0.49−0.90 oz•inch)
FWD Back Tension		0.5−5.0g•cm (0.01−0.07 oz•inch)
REV	CQ-102RC	35−65g•cm (0.49−0.90 oz•inch)
REV Back Tension		0.5−5.0g•cm (0.01−0.07 oz•inch)
FF, REW	CQ-201B	60−200g•cm (0.83−2.78 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 60g (more than 2.12 oz)
REV	CQ-403R	

SECTION 5
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and MW Auto Scan/Stop Level adjustments can be performed easier than it in ordinary procedure.

〈Set the Test Mode〉

1. Set the "OFF" mode.
2. Push the preset [4] button.
3. Push the preset [5] button.
4. Press the preset [1] button for more than two seconds.
5. Then the display indicates all lights, the test mode is set.

〈Release the Test mode〉

1. Push the "OFF" button.

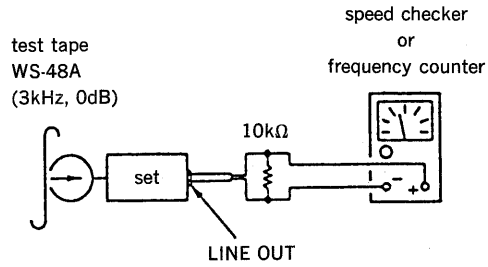
See the adjustment location from on page 29 for the adjustment.

DECK SECTION　**0dB=0.775V**

Tape Speed Adjustment

Procedure:

1. Put the set into the FWD PB mode.



Specification: Constant speed

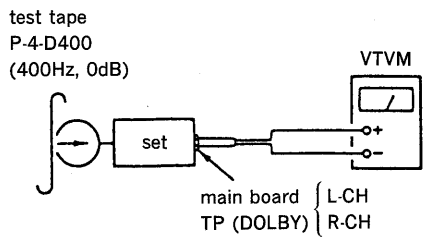
Speed checker	Frequency counter
−1.5 to +2.5%	2,955 to 3,075Hz

Adjustment Location: See page 29.

DOLBY Level Adjustment

Setting:

SHIFT button : ON (light up SET UP and PLAY MODE)
Preset [3] (PLAY MODE) button : NR OFF
SOUND (BAS) button : Center
SOUND (TRE) button : Center
SOUND (BAL) button : Center
SOUND (FAD) button : Center
SOUND (VOL) button : Maximum



Procedure:

1. Put the set into the FWD PB mode.
2. Adjust RV101 (L-CH) and RV201 (R-CH) so that VTVM reading is −6±0.5 dB (0.37 to 0.41V).

Adjustment Location: See page 29.

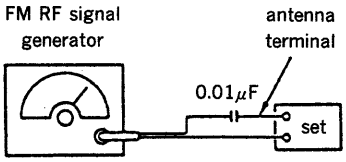
TUNER SECTION **0dB=1μV**

Cautions during repair
When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

FM Auto Scan/Stop Level Adjustment

Setting :

SOURCE button : FM

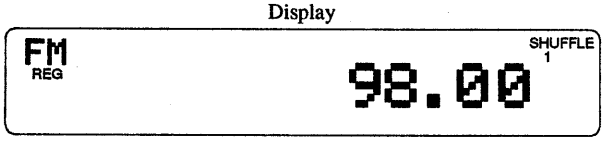


Carrier frequency : 98.00MHz
Output level : 22dB (12.6μV)
Mode : mono
Modulation : 1kHz, 22.5kHz deviation (30%)

Procedure :

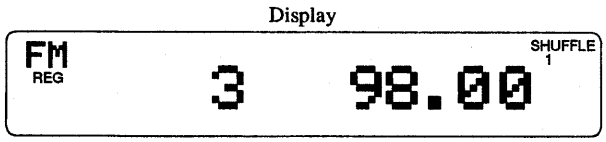
1. Set to the test mode. (See page 25.)
2. Push the [SOURCE] button and set to FM.

Display



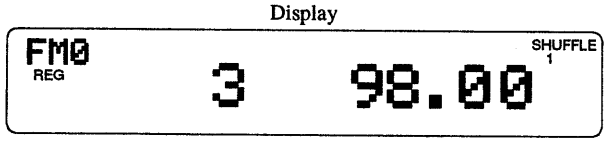
3. Push the preset [3] button.

Display



4. Adjust with the volume RV2 on TU1 so that the "FM" indication turns to "FM0" indication on the display window.
   But, in case of already indicated "FM0", turn the RV2 so that put out light "0" indication and adjustment.

Display

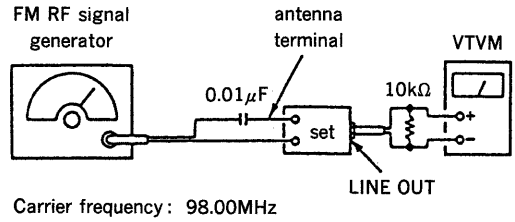


Adjustment Location : See page 29.

FM Noise Focus Adjustment

Setting :

SOURCE button : FM



Carrier frequency : 98.00MHz
Output level : 60dB (1mV)
Mode : mono
Modulation : 1kHz, 75kHz deviation (100%)

Procedure :

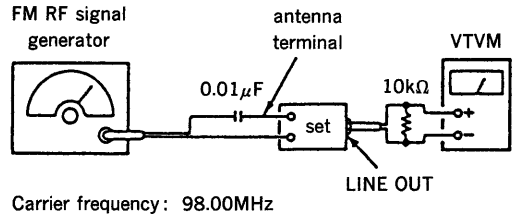
1. Tune the 98.00MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV3 on TU1 so that the output level is (A)−32dB then signal generator input set to −20dB.

Adjustment Location : See page 29.

FM Stereo Separation Adjustment

Setting :

SOURCE button : FM



Carrier frequency : 98.00MHz
Output level : 70dB (3.2mV)
Mode : stereo
Modulation : main : 1kHz, 33.75kHz deviation (45%)
sub : 1kHz, 33.75kHz deviation (45%)
19kHz pilot : 7.5kHz deviation (10%)

Procedure :

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 on TU1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 on TU1 for minimum reading.

L-CH Stereo separation : Ⓐ−Ⓑ
R-CH Stereo separation : Ⓒ−Ⓓ
The separations of both channels should be equal.

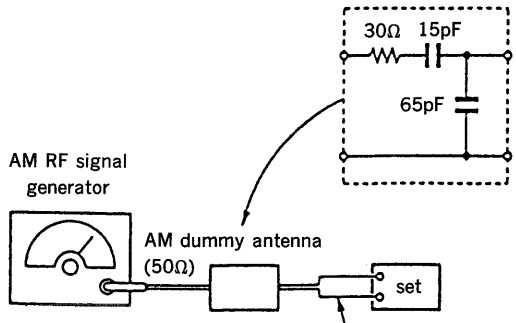
Specification : Separation more than 30dB

Adjustment Location : See page 29.

MW Auto Scan/Stop Level Adjustment

Setting :

SOURCE button : MW

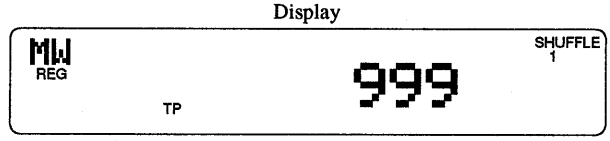


Carrier frequency : 999kHz
30% amplitude modulation by 1kHz signal
Output level : 33dB (44.7μV)

Procedure :

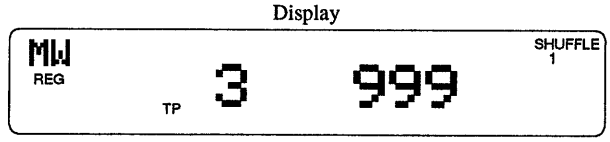
1. Set to the test mode. (See page 25.)
2. Push the [SOURCE] button and set to MW.

Display



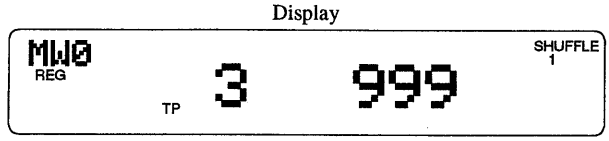
3. Push the preset [3] button.

Display



4. Adjust with the volume RV1 on TU1 so that the "MW" indication turns to "MW0" indication on the display window.
   But, in case of already indicated "MW0", turn the RV1 so that put out light "0" indication and adjustment.

Display

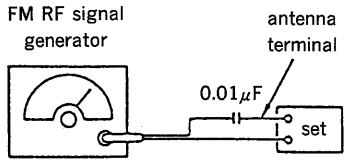


Adjustment Location : See page 29.

RDS S-Meter Adjustment

Setting :

SOURCE button : FM

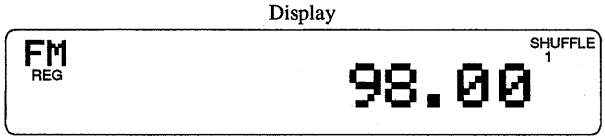


Carrier frequency : 98.00MHz
Output level : 35dB (56.2μV)
Mode : mono
Modulation : no modulation

Procedure :

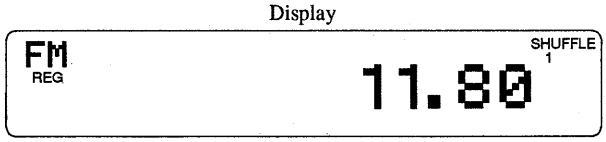
1. Set to the test mode. (See page 25.)
2. Push the [SOURCE] button and set to FM.

Display



3. Push the preset [10] button.
4. Adjust RV1 so that the display indication is "11.80".

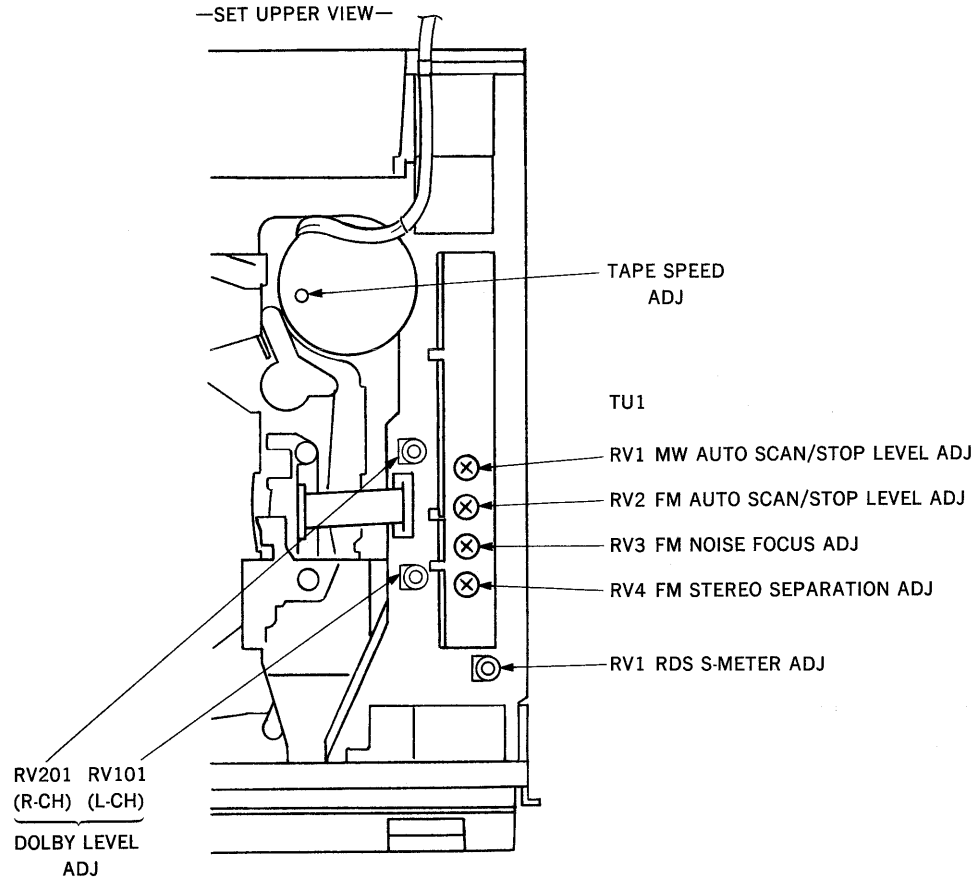
Display

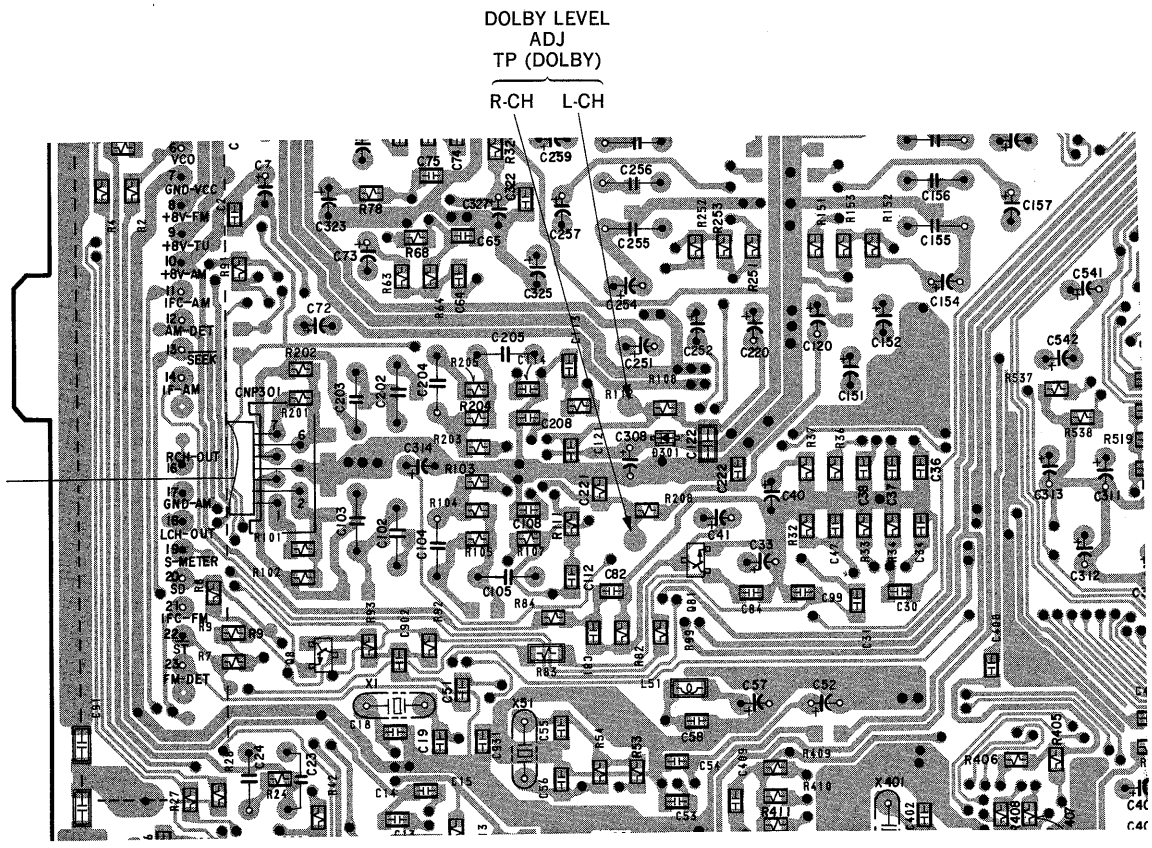


Specification : Display indication : 11.60 to 12.00

Adjustment Location : See page 29.

Adjustment Location :





SECTION 6
DIAGRAMS

6-1. IC PIN DESCRIPTIONS

• IC501 μPD78058GC-177-3B9 (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Pin Description
1	DSTSEL1	I	Destination the first setting A/D input
2	RCIN0	I	Rotary commander input
3	NIL	I	Connect to GND.
4	AVSS	—	GND
5	TI-R IND	O	Traffic information recording indicator output
6	TI-R PLAY	O	Traffic information recording play output
7	AVREF	—	D/A conversion reference power supply voltage
8—10	NCO	—	Not used.
11	COLSEL	I	Illumination color select input. Fixed at "L" (AMBER).
12	LCDSO	O	LCD serial data output
13	LCDCKO	O	LCD serial clock output
14	LCDCE	O	LCD chip enable output
15	$\overline{\text{LCDINH}}$	O	LCD blank display control output
16	UNISI	I	Serial data input
17	UNISO	O	Serial data output
18	UNICKI	I	Serial clock input
19	UNICKO	O	Serial clock output
20	$\overline{\text{BUSON}}$	O	BUS ON control output
21	$\overline{\text{SYSRST}}$	O	System reset control output
22	AMPON	O	Power amplifier power control output
23	NCO	—	Not used.
24	LED ON	O	LED ON/OFF control output
25	PW ON	O	System power control output
26	ILLON	O	Illumination power control output
27	COLOR	O	Illumination color select control output
28	$\overline{\text{AMS ON}}$	O	Tape AMS (Auto Music Sensor) control output
29	REL	I	Reel table rotation detect input
30	MTLIN	I	Auto METAL detect input
31, 32	POS3, POS2	I	Position signal detect input
33	GND	—	GND
34, 35	POS0, POS1	I	Position signal detect input
36	LM LOD	O	Loading motor control output (Loading direction : forward)
37	LM EJ	O	Loading motor control output (Eject direction : reverse)
38	N $\overline{\text{R}}$ OUT	O	Forward/Reverse detect output
39	MTLON	O	METAL control output
40	CMON	O	Capstan motor control output
41	TAPON	O	Tape power control output
42	PWSEL	I	Power select the first setting input
43	RCIN1	I	Rotary commander input
44	$\overline{\text{TEST}}$	I	Test mode setting input
45	$\overline{\text{EQ SEL}}$	I	Equalizer connection with/without the first setting input
46	BEEP	O	Buzzer control output
47	MUT	O	System mute control output

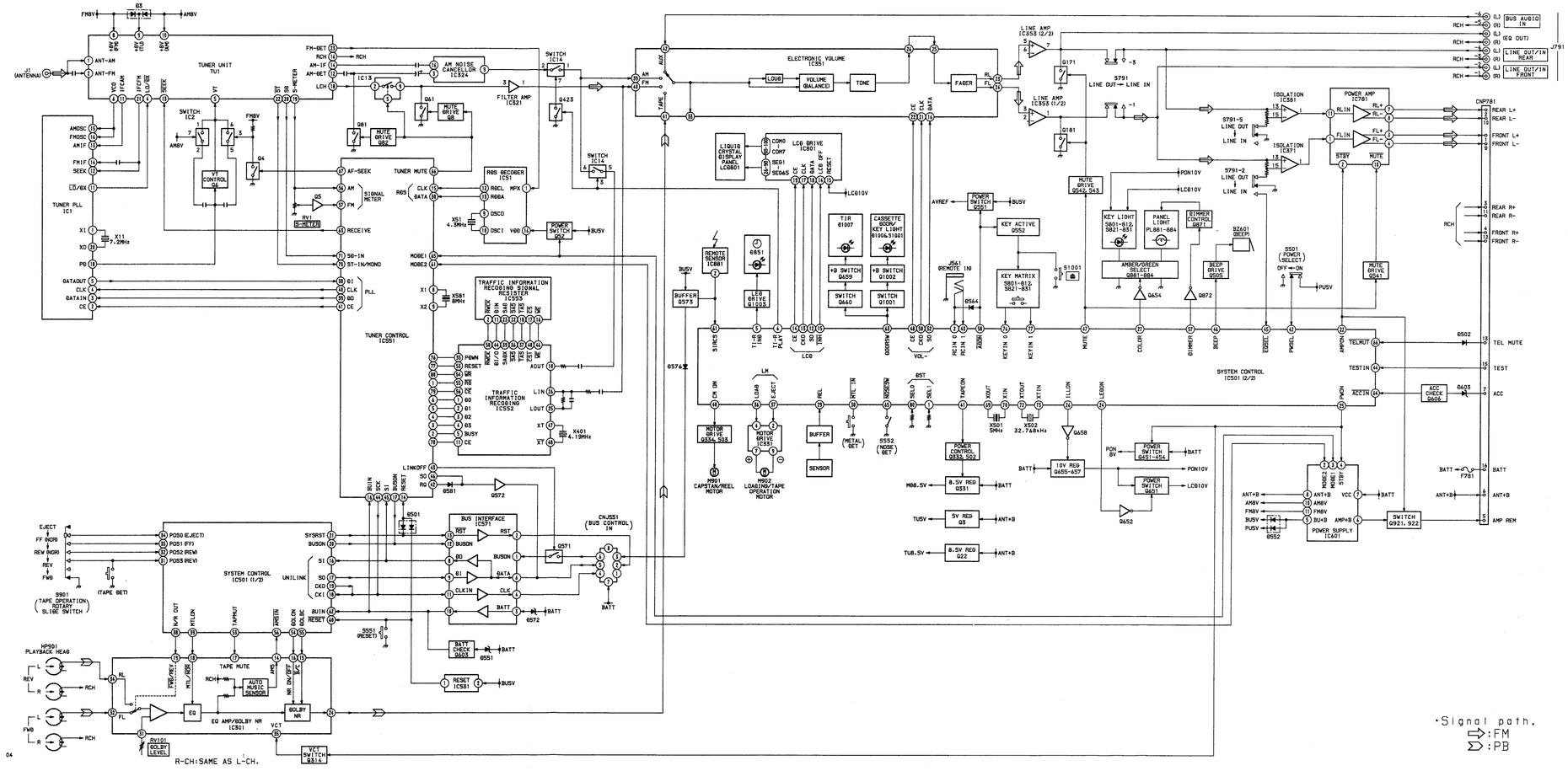
Pin No.	Pin Name	I/O	Pin Description
48	VOLCE	O	Electronic volume serial chip enable output
49	SUBCE	O	Sub volume serial chip enable output. Not used in this set.
50	VOLCKO	O	Electronic volume serial clock output
51	SUBCKO	O	Sub volume serial clock output. Not used in this set.
52	VOLSO	O	Electronic volume serial data output
53	TAPMUT	O	Tape mute control output
54	DOLON	O	DOLBY control output
55	DOLBC	O	DOLBY B/C select control output
56	$\overline{\text{AMSIN}}$	I	At AMS, music with/without detect input
57	DIMMER	O	Dimmer control output
58	$\overline{\text{AD ON}}$	O	A/D select power control output
59	NIL	—	Connect to GND.
60	$\overline{\text{RESET}}$	I	Reset input
61	SIRCS	I	Remote commander input
62	BU IN	I	Back-up power detect input
63	$\overline{\text{DOORSW}}$	I	Front panel open/close detect input
64	$\overline{\text{ACCIN}}$	I	Accessory power detect input
65	$\overline{\text{NOSESW}}$	I	Front panel with/without detect input
66	$\overline{\text{TELMUT}}$	I	Telephone mute detect input
67	KEYACK	I	Key input acknowledge
68	VDD	—	Microcomputer power voltage supply
69	X OUT	—	Main ceramic oscillator output (5MHz)
70	X IN	—	Main ceramic oscillator input (5MHz)
71	GND	—	GND
72	XT OUT	—	Sub crystal oscillator output (32.768kHz)
73	XT IN	—	Sub crystal oscillator input (32.768kHz)
74	AVDD	—	A/D conversion power supply voltage
75	AVREF	—	A/D conversion reference power supply voltage
76, 77	KEYIN0, KEYIN1	I	Key input
78	KEYSEL0	I	Key function select the first setting input
79	KEYSEL1	I	Key function select the first setting input
80	DSTSEL0	I	Destination the first setting A/D input

• IC551 MN1883220S4C1 (TUNER CONTROL)

Pin No.	Pin Name	I/O	Pin Description
1	TAR RD	I	Read pulse input terminal of data (D0 to D3).
2	TAR BUSY	I	BUSY output monitor terminal
3—6	TAR D3—TAR D0	I/O	Command input/output
7	VDD	—	Power supply terminal (+5V)
8	X1	—	Clock input (8MHz)
9	X2	—	Clock output (8MHz)
10	GND	—	GND
11	XI	—	Not used. (Connect to GND.)
12	—	—	Not used. (Open)
13	XO	—	Not used. (Connect to GND.)
14	RESET	I	Reset input
15	RDS-CLK	I	RDS CLK signal input from RDS decoder (IC51).
16	BU IN	I	Back-up power supply detection input. "H" : Back-up ON
17	BUSON	I	BUS interface ON/OFF selection input from the System Control (IC501).
18—29	—	—	Not used. (Open)
30	RDS-DATA	I	RDS DATA signal input from RDS decoder (IC51).
31	—	—	Not used. (Connect to GND.)
32—35	—	—	Not used. (Open)
36, 37	—	—	Not used. (Connect to GND.)
38	PLL-DI	I	Data input from the TU PLL (IC1).
39	PLL-DO	O	Data output to the TU PLL (IC1).
40	PLL-CLK	O	Clock output to the TU PLL (IC1).
41	CE	O	Chip enable output to the TU PLL (IC1).
42	RQ	O	BUS interface request output. Terminal for requesting communication requests at "H".
43	LINK-OFF	O	BUS interface link ON/OFF selection output. "H" : LINK OFF
44	SCK	I	Serial clock input from the System Control (IC501).
45	SI	I	Data input from the BUS interface (IC571).
46	SO	O	Data output to the BUS interface (IC571).
47	VDD	—	Power supply terminal (+5V)
48	AVDD	—	Power supply terminal (+5V)
49	VREF	I	Reference voltage input terminal of A/D conversion.
50, 51	—	—	Not used. (Connect to GND.)
52	SRAM-RST	I	SRAM reset input. (Fixed at "L".)
53	MUTE-SEL	—	Not used. (Connect to GND.)
54	DIST-SEL1	I	Desination selection input terminal. (Fixed at "L" : AEP, UK model, "H" : German model.)
55	DIST-SEL0	I	Desination selection input terminal. (Fixed at "L".)
56	AM-S. METER	I	AM S meter voltage detection input
57	FM-S. METER	I	FM S meter voltage detection input. Uses the A/D conversion functions during BTM and RDS.
58—60	—	—	Not used. (Connect to GND.)
61	MODE2	O	Tuner ON/OFF selection output to the Power Supply (IC601).
62	—	—	Not used. (Open)
63	RECEIVE	I	Receive input. Input level "L" when change the frequency.
64	—	—	Not used. (Fixed at "L".)

Pin No.	Pin Name	I/O	Pin Description
65	MODE1	O	FM ON/OFF selection output to the Power Supply (IC601).
66	TUNER-MUTE	O	Muting control signal output
67	AF-SEEK	O	AF SEEK output
68	—	—	Not used. (Fixed at "L".)
69	—	—	Not used. (Open)
70	ST-IN/MONO	I	STEREO indicator control input
71	SD-IN	I	SD input
72—75	—	—	Not used. (Open)
76	TAR PDWN	O	Power down terminal
77	TAR RES	O	Reset/power down terminal
78	TAR CE	O	Data permission/prohibition setting through D0 to D3. "H" for permission.
79	TAR $\overline{CE}$	O	Data permission/prohibition setting through D0 to D3. "L" for permission.
80	TAR WR	I	Write pulse input terminal of data (D0 to D3).

6-2. BLOCK DIAGRAM


TUNER UNIT TU1
TUNER PLL IC1
TUNER CONTROL IC551
SYSTEM CONTROL IC501 (1/2)
SYSTEM CONTROL IC501 (2/2)
ELECTRONIC VOLUME IC551
LINE AMP IC3SS (2/2)
LINE AMP IC3SS (1/2)
POWER AMP IC781
POWER SUPPLY IC601
BUS INTERFACE IC571
AM NOISE CANCELLOR IC524
FILTER AMP IC521
SWITCH IC14
SWITCH IC2
RDS DECODER IC51
TRAFFIC INFORMATION RECORDING SIGNAL RESISTER IC553
TRAFFIC INFORMATION RECORDING IC552
EQ AMP/DOLBY NR IC501
LIQUID CRYSTAL DRIVER FRAME LCD801
LCD DRIVE IC801
REMOTE SENSOR IC881
KEY MATRIX S801-812, S821-831
KEY LIGHT S801-812, S821-831
PANEL LIGHT PL881-884
DIMMER CONTROL Q871
BZ601 (BEEP)
S551 (POWER) SELECT
AMBER/GREEN SELECT S881-884
CASSETTE DOOR/ KEY LIGHT S1004,S1001
S1001
J561 (REMOTE IN)
TIR D1007
+B SWITCH Q459
+B SWITCH D1002
SWITCH Q460
SWITCH D1001
KEY ACTIVE Q552
POWER SWITCH Q551
BUFFER Q573
6851
LCD DRIVE Q1055
MUTE DRIVE Q542, 543
MUTE DRIVE Q541
BEEP DRIVE Q605
ACC CHECK Q606
D403
D502
CNP781
CNJ551 (BUS CONTROL) IN
J791
BUS AUDIO IN
EQ OUT
LINE OUT/IN REAR
LINE OUT/IN FRONT
S791 LINE OUT → LINE IN
S791-5 LINE OUT → LINE IN
S791-2 LINE OUT → LINE IN
ISOLATION IC581
ISOLATION IC871
REAR L+
REAR L-
FRONT L+
FRONT L-
REAR R+
REAR R-
FRONT R+
FRONT R-
TEL MUTE
TEST
ACC
BATT
ANT+B
AMP REM
F781
D502
D403
Q572
Q571
Q573
Q581
Q582
Q583
Q584
Q585
Q586
Q587
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Q617
Q618
Q619
Q620

● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D3	F-10	IC371	D-7
D4	I-15	IC381	B-9
D21	I-15	IC501	F-4
D95	J-10	IC531	H-1
D96	I-10	IC551	I-4
D97	J-13	IC552	I-6
D98	J-12	IC553	I-7
D301	G-15	IC571	E-2
D331	F-21	IC601	D-19
D332	F-2	IC781	B-17
D451	E-17		
D501	H-4	Q3	I-8
D502	E-19	Q4	I-13
D543	E-6	Q5	H-11
D544	F-5	Q6	I-9
D551	G-1	Q8	H-13
D552	G-21	Q22	I-8
D553	J-4	Q52	H-7
D554	J-22	Q61	F-9
D561	C-1	Q71	E-10
D562	C-1	Q81	G-15
D564	C-1	Q82	H-10
D571	D-21	Q171	D-8
D572	D-21	Q181	D-8
D573	C-2	Q271	E-9
D574	C-2	Q281	E-9
D575	C-1	Q314	G-8
D576	C-21	Q331	F-2
D581	I-19	Q332	F-20
D600	C-4	Q334	E-21
D601	C-4	Q423	G-6
D602	E-3	Q451	D-5
D603	D-20	Q452	D-6
D651	H-1	Q453	E-18
D652	I-1	Q454	E-17
D656	J-17	Q502	F-21
D657	J-17	Q503	F-20
D781	E-20	Q505	J-20
D782	D-20	Q541	F-5
D783	C-20	Q542	E-6
D790	E-20	Q543	F-6
D971	F-18	Q551	J-4
D1001	J-26	Q552	J-4
D1002	J-26	Q571	D-21
D1003	J-26	Q572	C-1
D1004	J-25	Q573	C-22
D1005	J-25	Q603	E-3
D1006	H-24	Q606	E-3
D1007	H-24	Q651	I-2
		Q652	I-21
IC1	I-9	Q654	I-21
IC2	I-10	Q655	H-21
IC13	F-10	Q656	I-21
IC14	G-6	Q657	H-21
IC51	H-8	Q658	H-21
IC301	G-8	Q659	J-4
IC321	F-9	Q660	J-5
IC324	G-7	Q921	E-19
IC331	G-2	Q922	E-18
IC351	E-7	Q1001	J-25
IC352	E-8	Q1002	I-25
IC353	E-6	Q1003	J-25

Note :
- ○— : parts extracted from the component side.
- ● : Through hole.
- ▬ : Pattern on the side which is seen. (The other layer's patterns are not indicated.)

6-3. PRINTED WIRING BOARDS—MAIN SECTION—

[MAIN BOARD] (SIDE A)

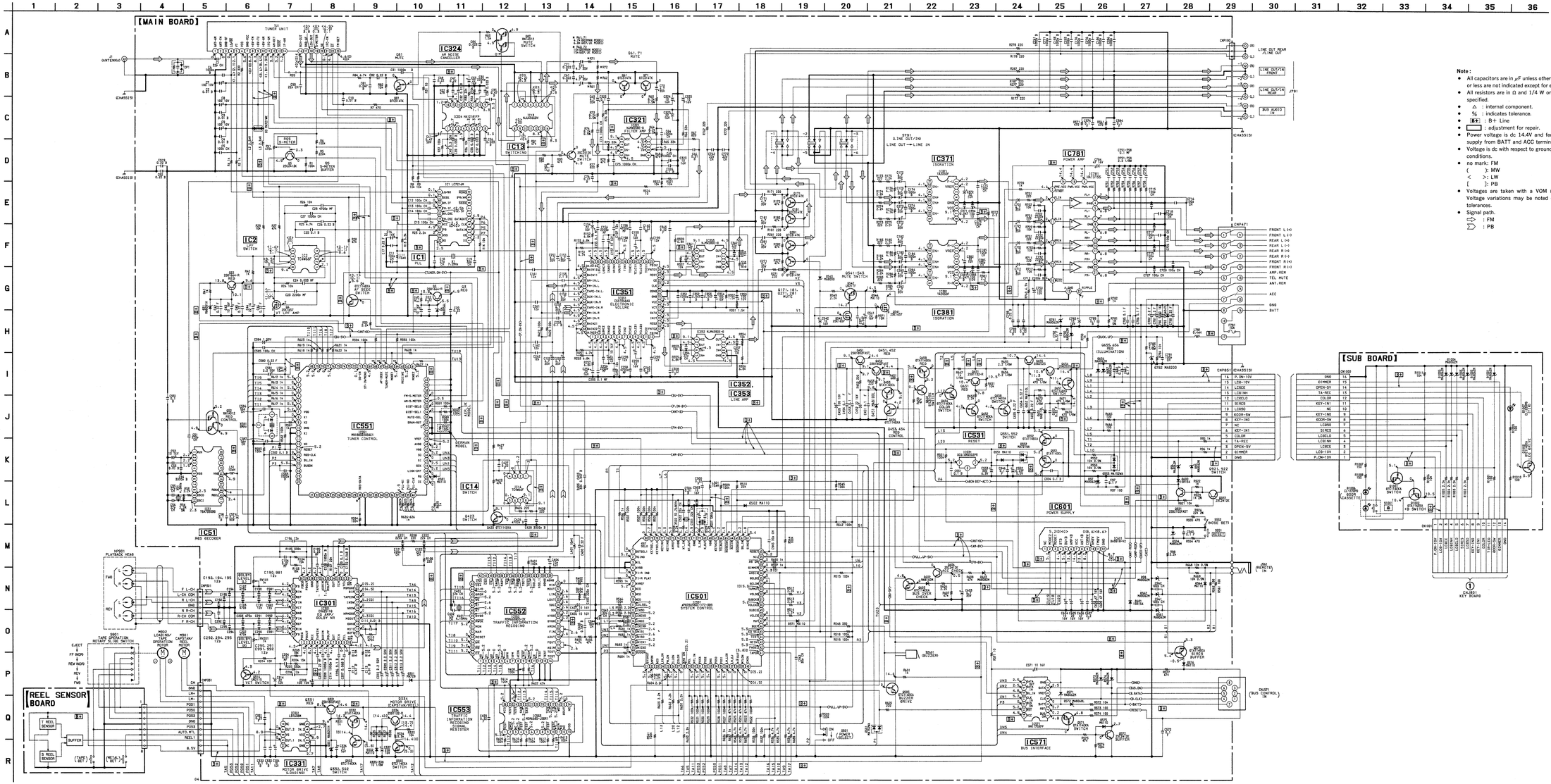
[MAIN BOARD] (SIDE B)

[REEL SENSOR BOARD]

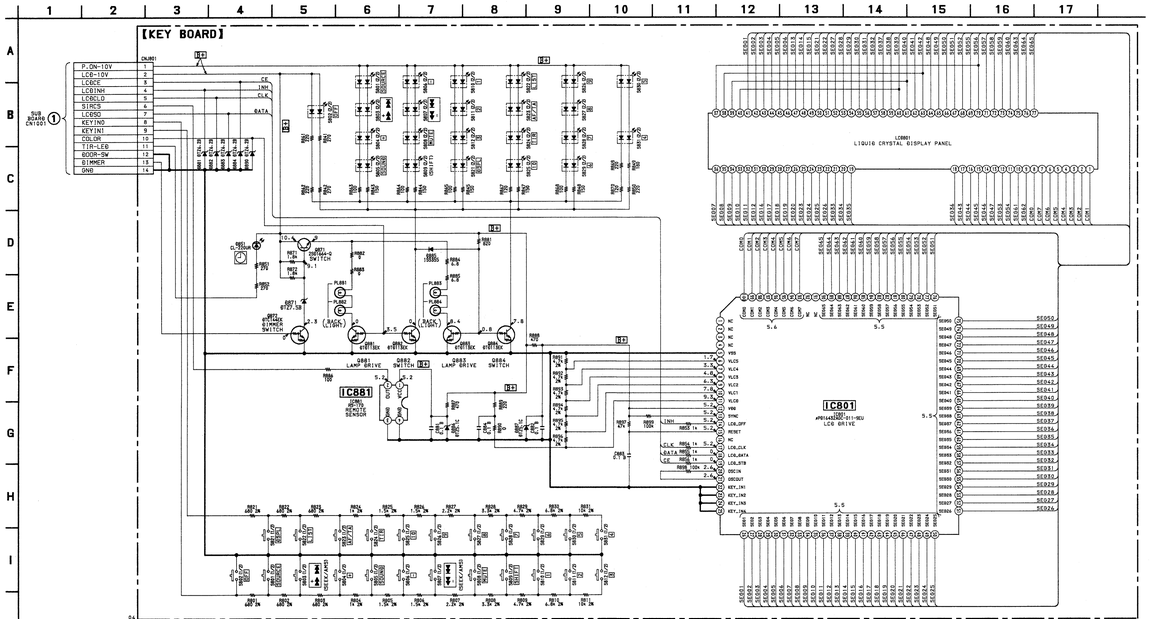
[SUB BOARD] (SIDE A)

[SUB BOARD] (SIDE B)

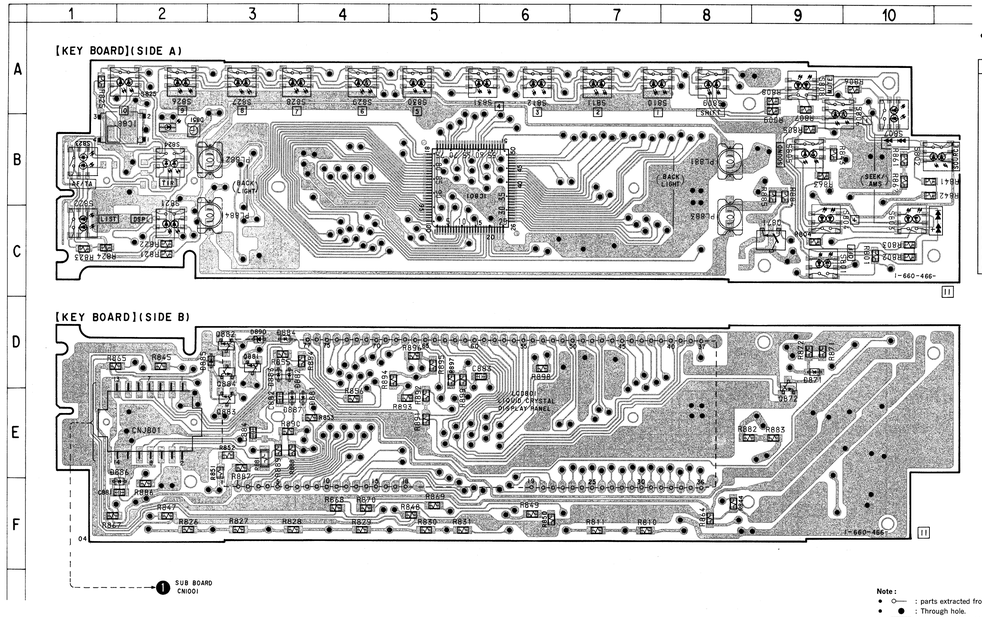
6-4. SCHEMATIC DIAGRAM—MAIN SECTION— • Refer to page 53 for IC Block Diagrams.



6-5. SCHEMATIC DIAGRAM—PANEL SECTION—



6-6. PRINTED WIRING BOARD—PANEL SECTION—



Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- B+ : B+ Line
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

• Semiconductor Location

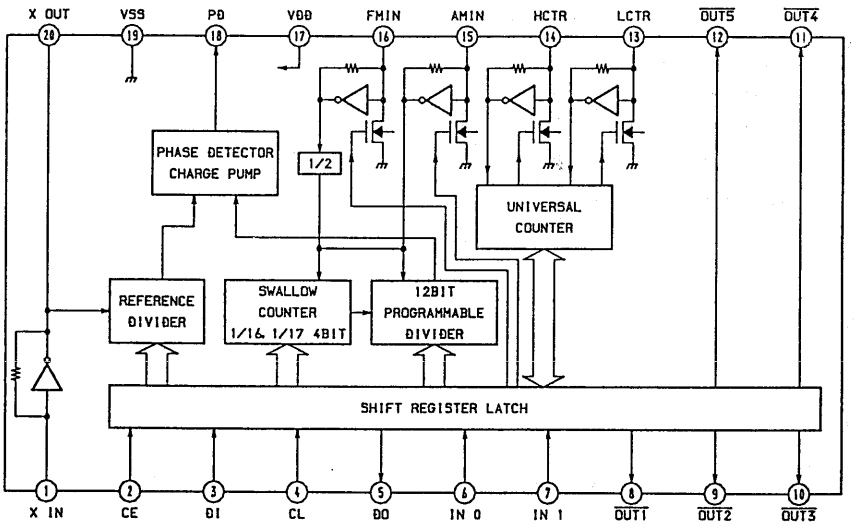
Ref. No.	Location
D851	B-2
D871	D-9
D881	E-4
D882	D-3
D883	D-3
D884	D-3
D885	D-3
D886	E-2
D887	E-3
D890	D-3
IC801	B-5
IC881	B-2
Q871	C-9
Q872	D-9
Q881	D-3
Q882	D-3
Q883	D-3
Q884	E-3

Note:

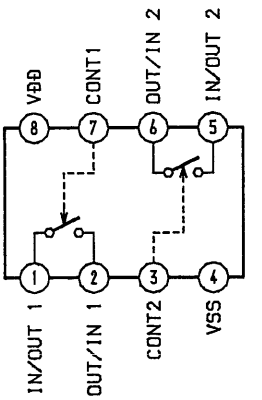
- ○— : parts extracted from the component side.
- ● : Through hole.
- ▒▒ : Pattern on the side which is seen. (The other layer's patterns are not indicated.)

• **IC Block Diagrams**

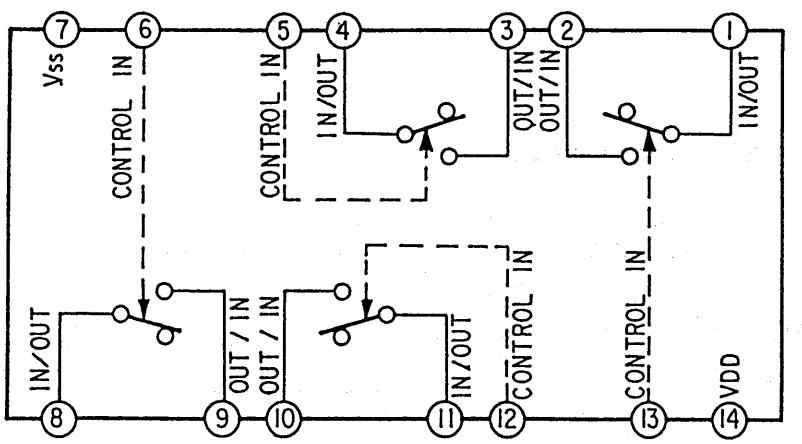
IC1 LC7216M



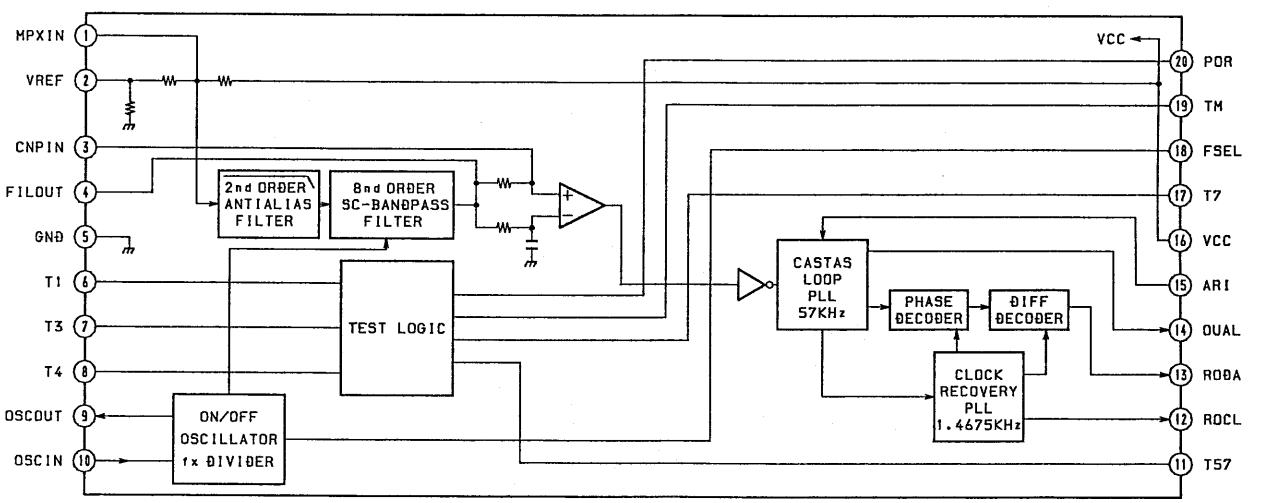
IC2, 14 TC4W66F



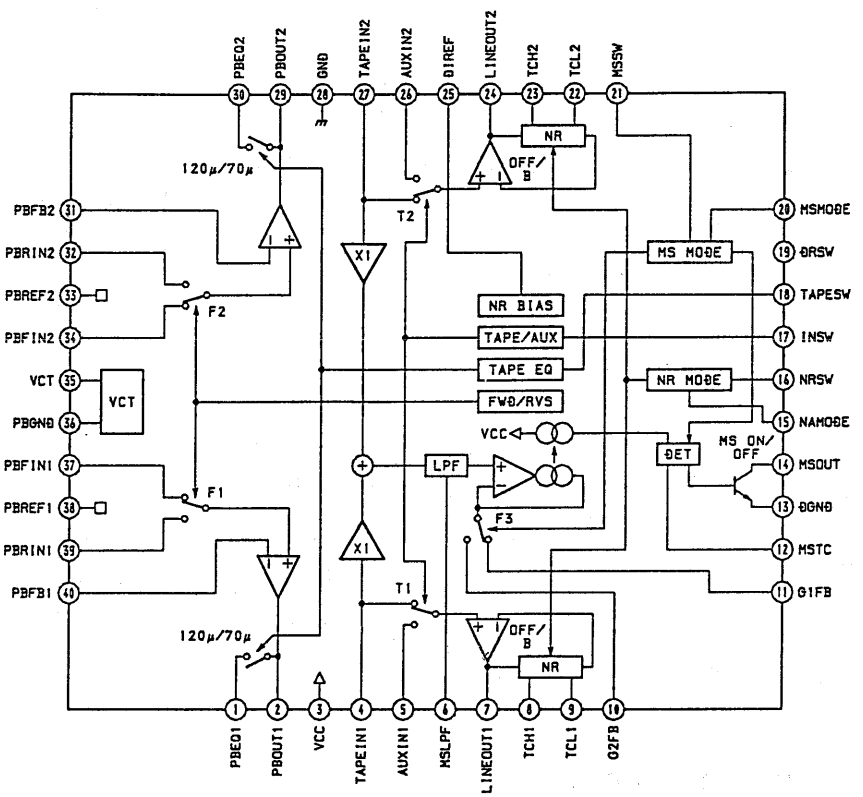
IC13 NJU4066BV



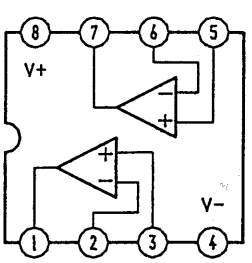
IC51 TDA7330BD



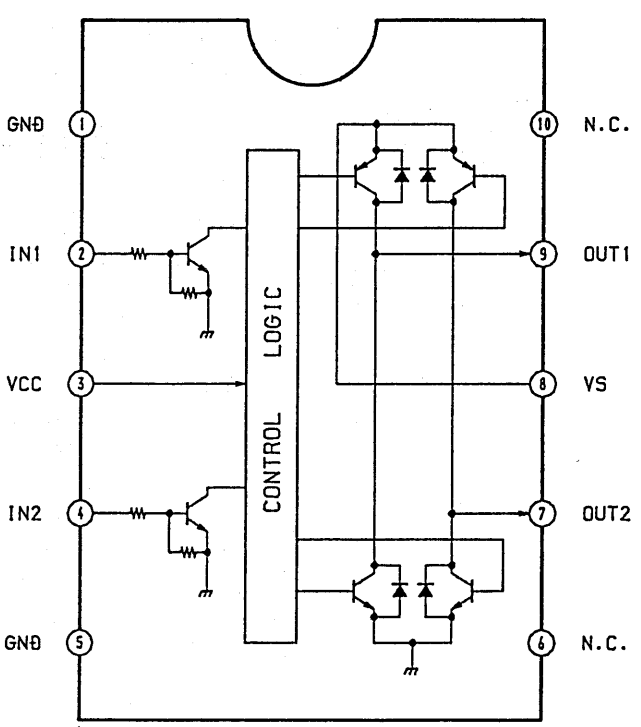
IC301 CXA2511Q



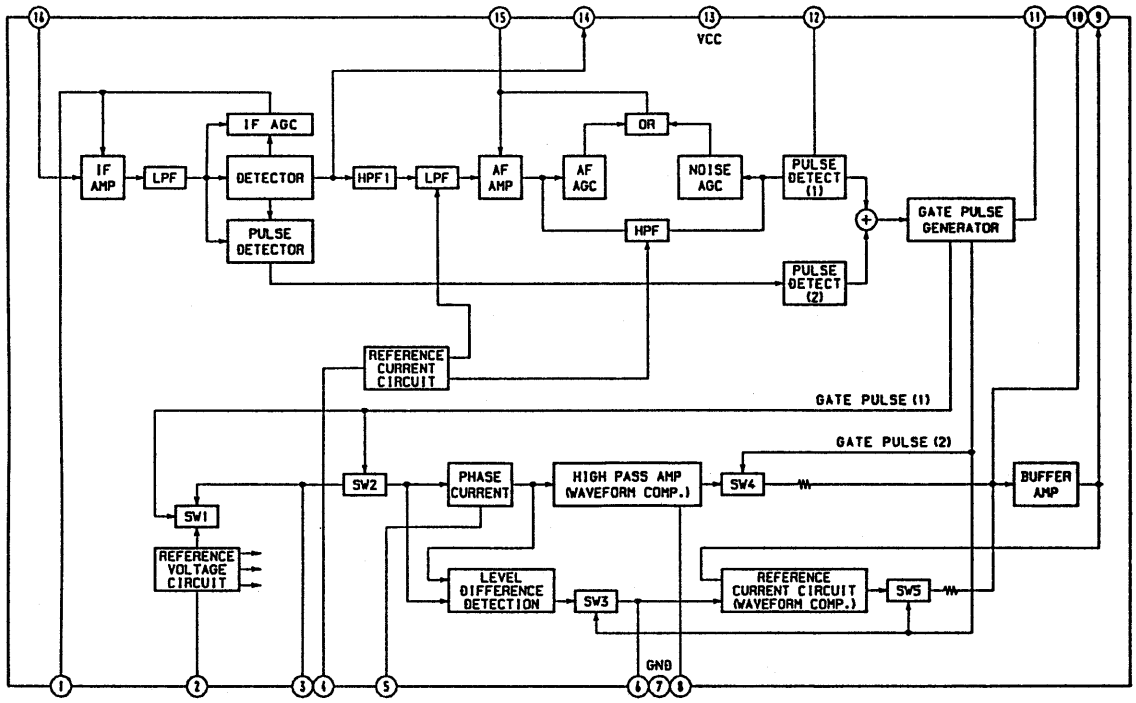
IC321 NJM4558E-D
IC352, 353 NJM4580E-D



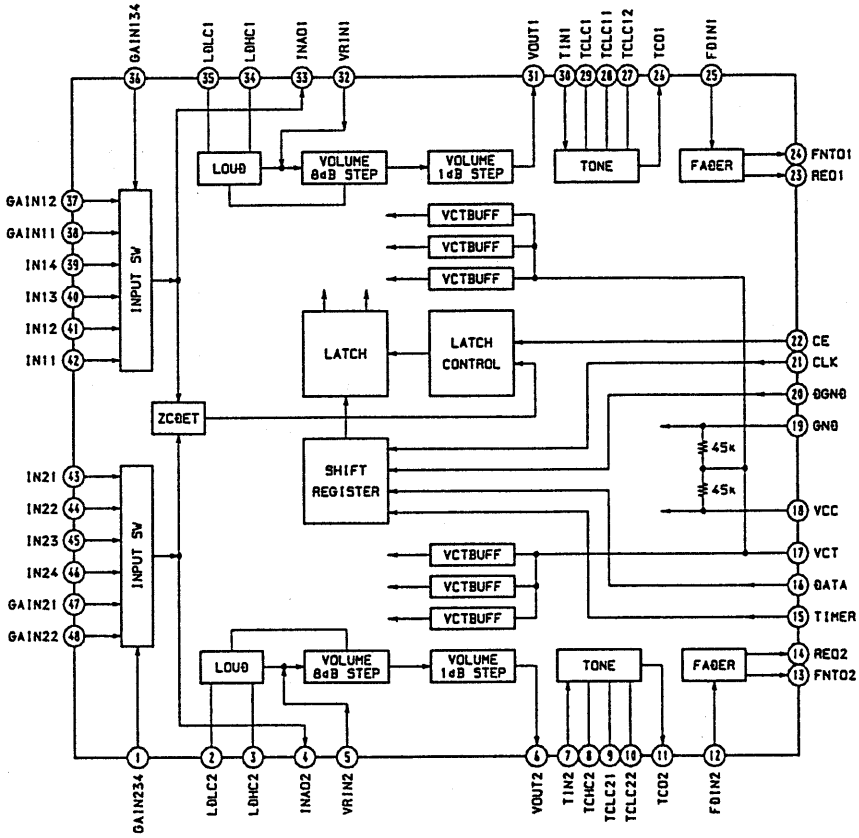
IC331 LB1638M



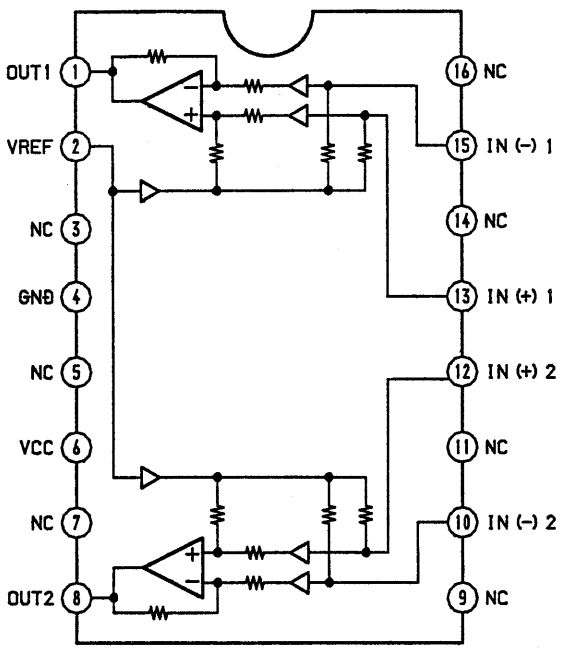
IC324 HA12181FP



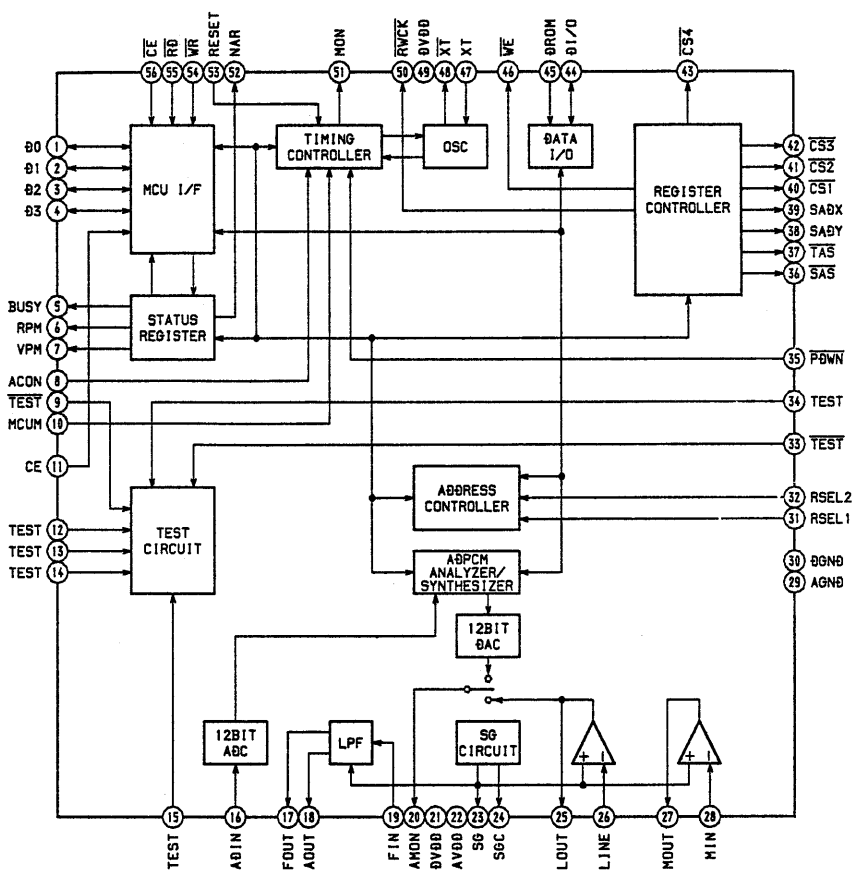
IC351 CXA1946AQ



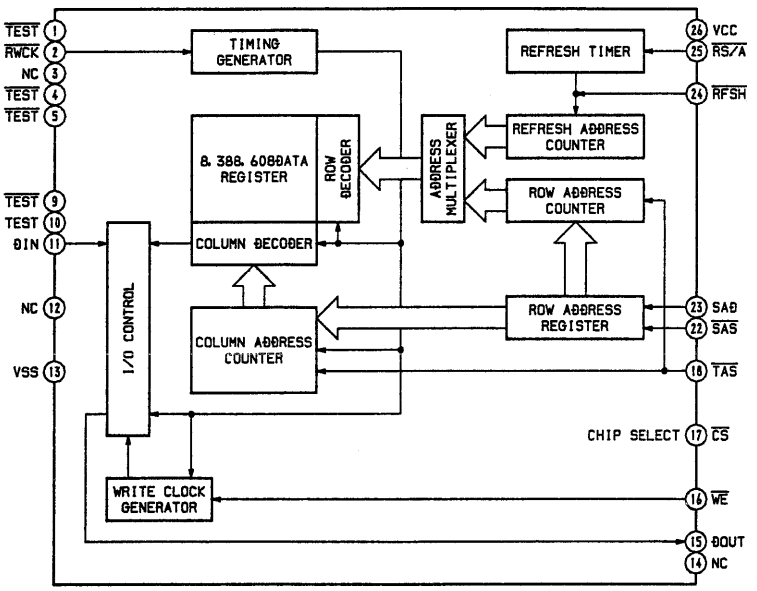
IC371, 381 TA2050F



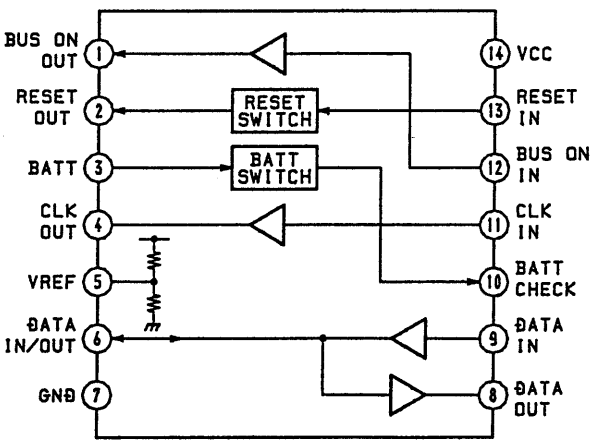
IC552 MSM6688GS-2K



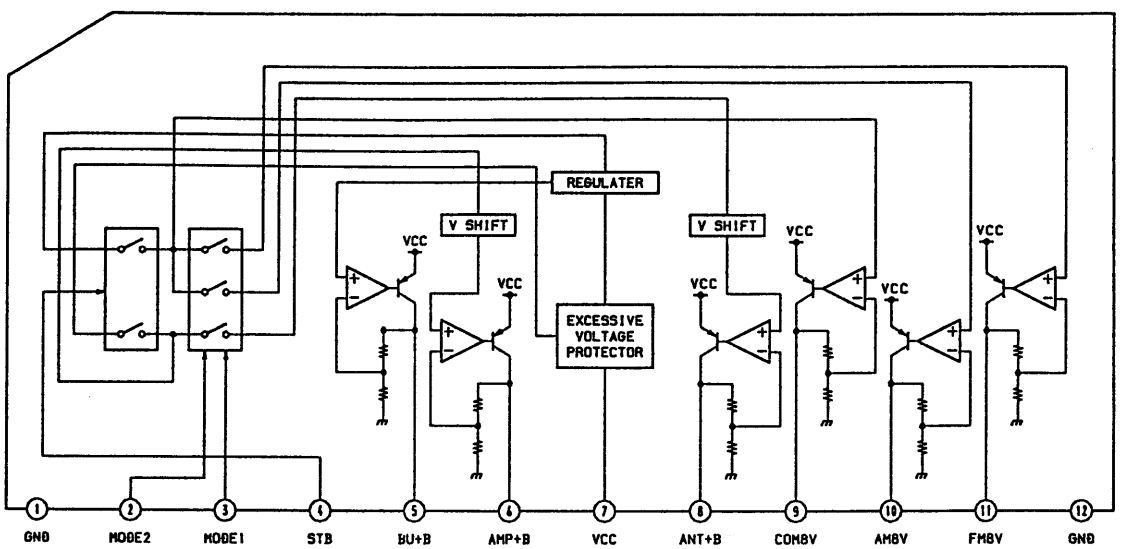
IC553 MSM6685-JSDR1



IC571 MM1175XFF



IC601 BA3918-V2

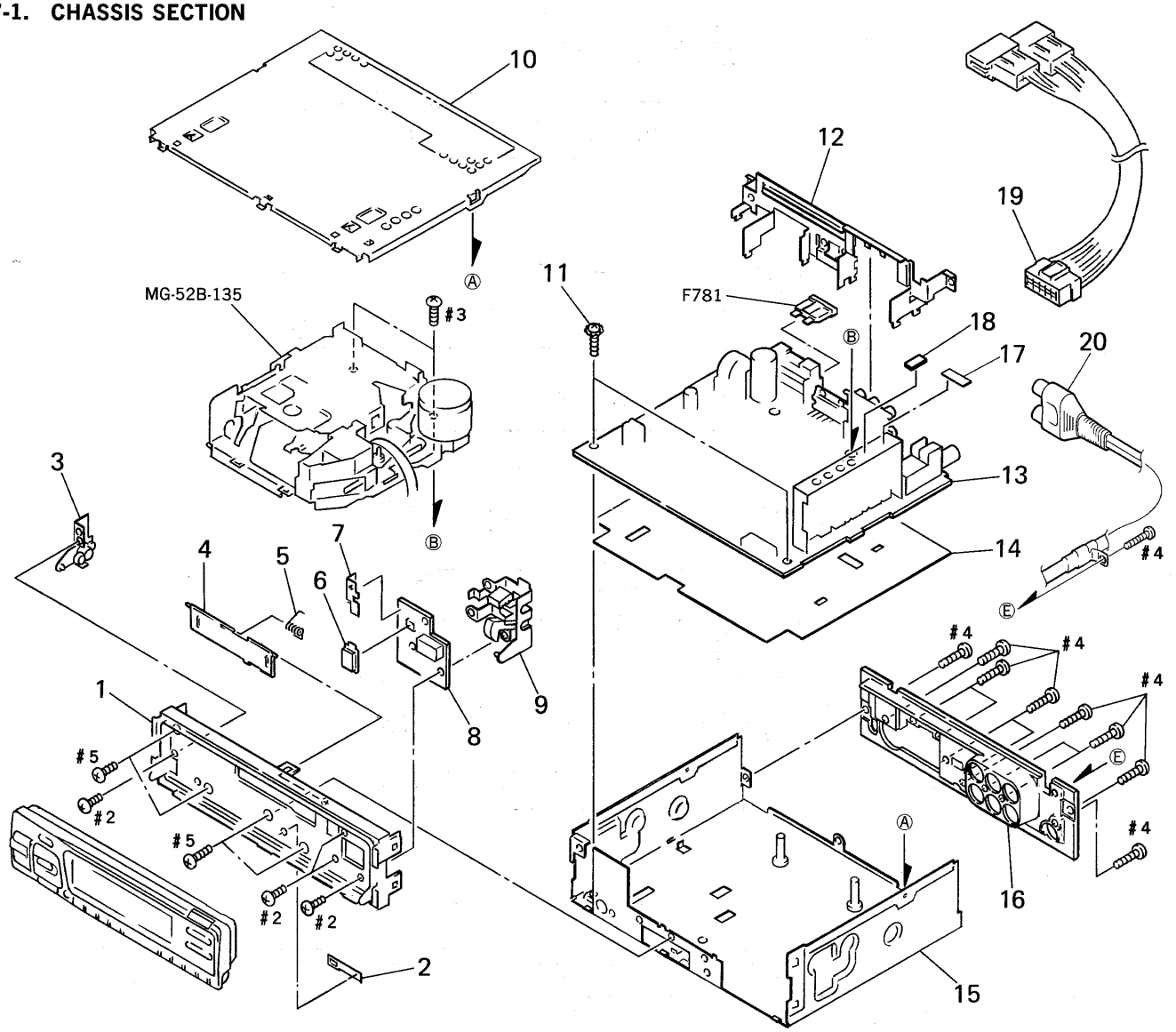


SECTION 7
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  G : German model

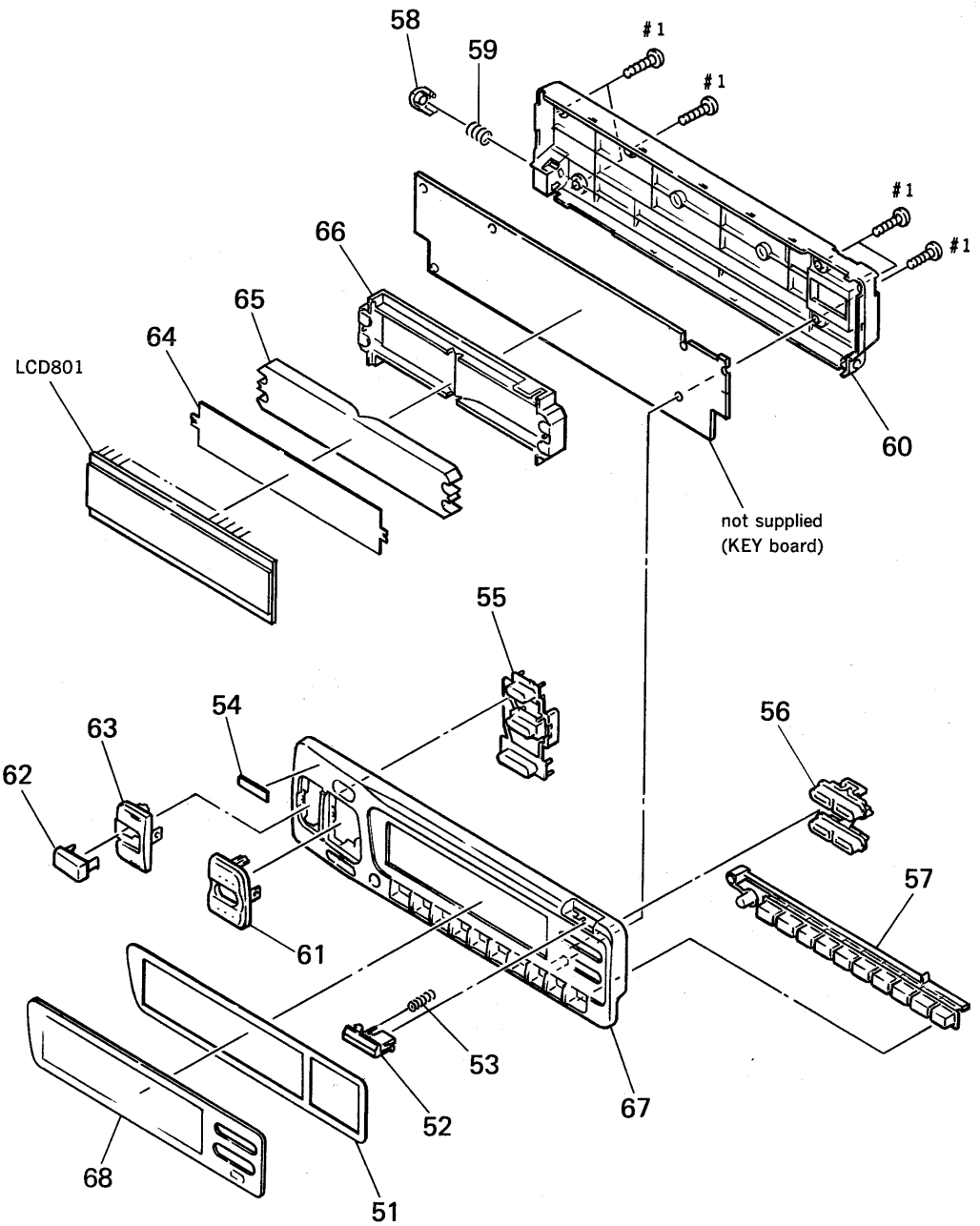
7-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-932-208-01	PANEL, SUB	
2	X-3371-545-1	SPRING (SWITCH) ASSY	
3	A-3291-624-A	SHAFT ASSY	
4	3-932-205-01	DOOR, CASSETTE	
5	3-913-076-01	SPRING (C DOOR), TORSION	
6	3-932-223-01	BUTTON (EJECT)	
7	3-932-224-01	PLATE (C DOOR), LIGHT GUIDE	
* 8	1-660-465-11	SUB BOARD	
9	X-3371-543-1	LOCK (SHAFT) ASSY	
* 10	X-3371-546-1	COVER ASSY	
11	3-915-923-01	SCREW, GROUND POINT	

Ref. No.	Part No.	Description	Remark
* 12	3-932-212-01	BRACKET (IC)	
* 13	A-3309-154-A	MAIN BOARD, COMPLETE (G)	
* 13	A-3309-155-A	MAIN BOARD, COMPLETE (AEP, UK)	
* 14	3-932-206-01	INSULATOR	
* 15	X-3371-542-1	CHASSIS ASSY	
* 16	3-932-210-01	HEAT SINK	
* 17	3-355-209-01	PLATE (B), GROUND	
18	9-911-840-XX	CUSHION (U)	
19	1-776-527-21	CORD (WITH CONNECTOR) (ISO)	
20	1-751-000-61	CORD (WITH CONNECTOR)	
F781	1-532-982-11	FUSE (BLADE TYPE) (AUTO FUSE) 15A	

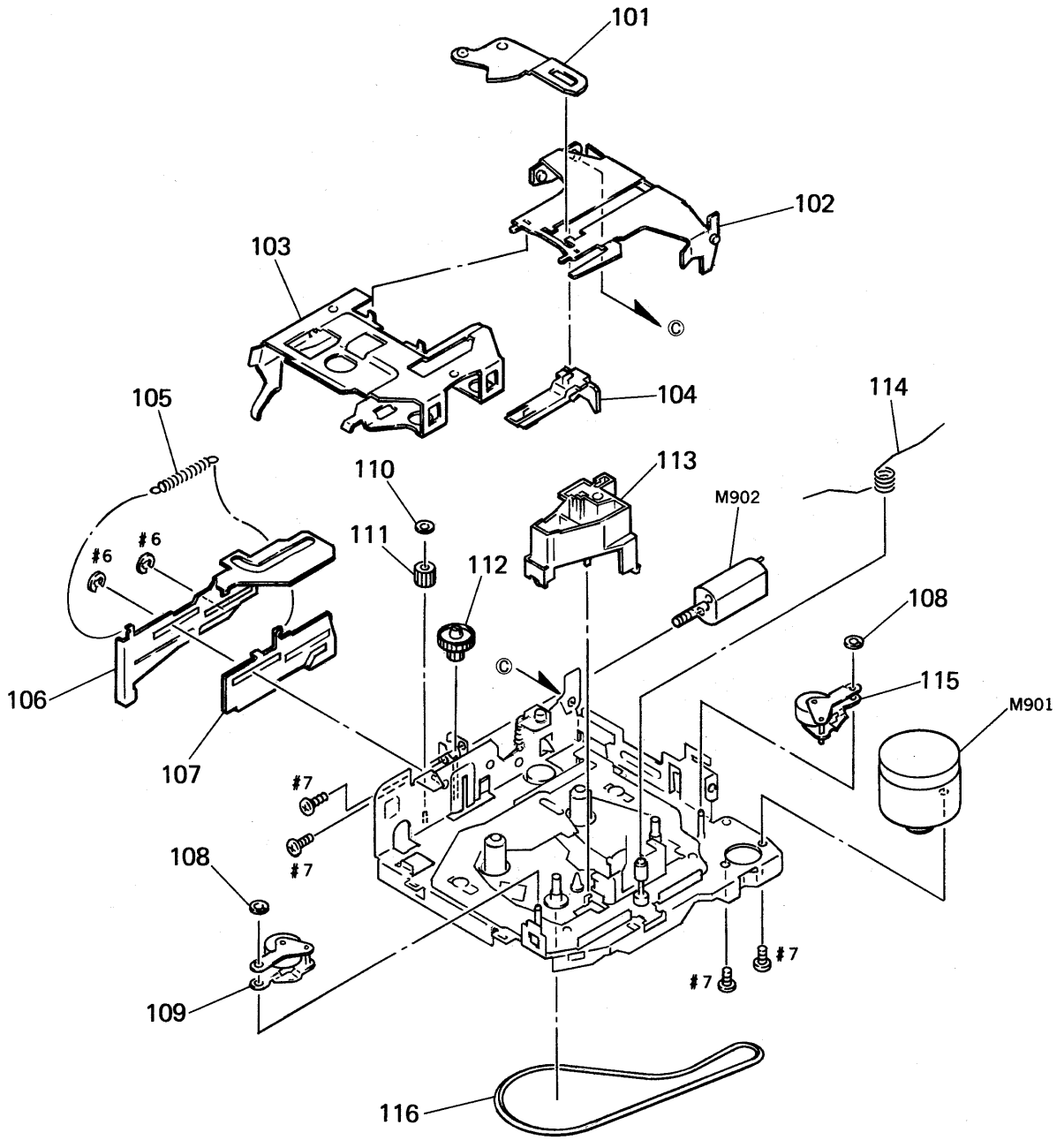
7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-934-279-01	SHEET (LCD), ADHESIVE	
52	3-932-219-01	BUTTON (OPEN)	
53	3-932-225-01	SPRING (OPEN)	
54	3-904-194-01	EMBLEM (NO. 2.5), SONY	
55	3-932-216-01	BUTTON (O.S.M)	
56	3-932-218-01	BUTTON (D/L T/A)	
57	3-932-217-11	BUTTON (1-10)	
58	3-932-239-01	BEARING (RELEASE)	
59	3-932-240-01	SPRING (RELEASE)	
60	3-932-207-01	PANEL, FRONT BACK	

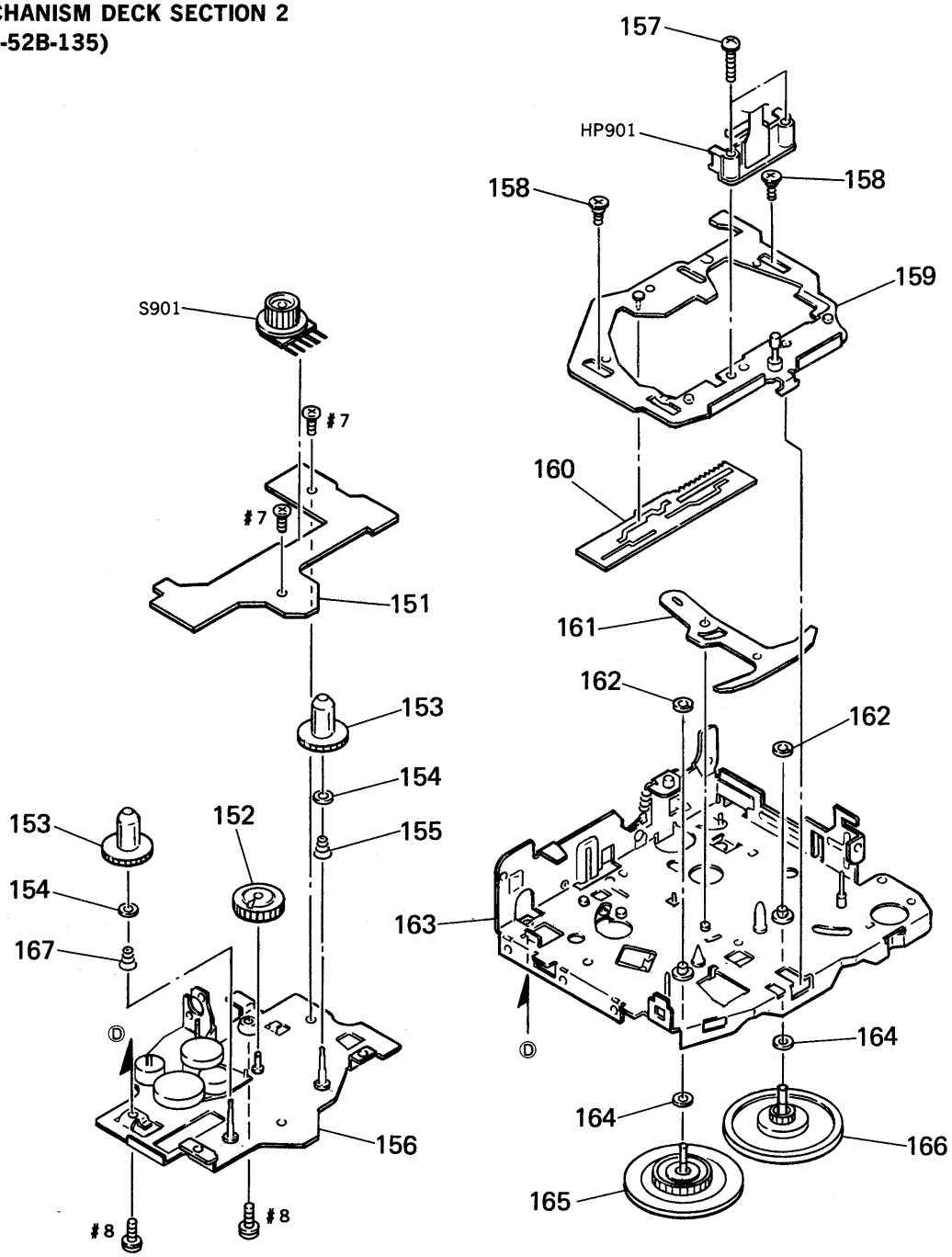
Ref. No.	Part No.	Description	Remark
61	3-932-215-01	BUTTON (+,-)	
62	3-932-214-01	BUTTON (SOURCE)	
63	3-932-213-01	BUTTON (S/A)	
* 64	3-932-221-01	SHEET (REFLECTOR)	
* 65	3-932-220-01	PLATE (LCD), LIGHT GUIDE	
* 66	3-932-222-01	HOLDER (LCD)	
67	3-932-241-01	PANEL, FRONT	
68	3-932-242-01	PLATE (LCD), INDICATION	
LCD801	1-801-192-11	DISPLAY PANEL, LIQUID CRYSTAL	

7-3. MECHANISM DECK SECTION 1 (MG-52B-135)



Ref. No.	Part No.	Description	Remark
* 101	3-933-347-01	ARM (SUCTION)	
102	3-933-340-01	HANGER	
103	3-928-671-01	HOUSING	
104	3-933-346-01	CATCHER	
105	3-933-341-01	SPRING (LEVER LDG), TENSION	
106	3-928-674-01	LEVER (LDG-B)	
* 107	3-928-673-01	LEVER (LDG-A)	
108	3-321-813-01	WASHER, COTTER POLYETHYLENE	
109	X-3370-977-1	LEVER (PINCH R) ASSY	
110	3-341-753-11	WASHER, POLYETHYLENE	
111	3-933-335-01	GEAR (LDG-FT)	
112	3-928-667-01	GEAR (LDG-A)	
113	3-933-344-01	GUIDE (C)	
114	3-928-670-01	SPRING (PINCH PRESS)	
115	X-3370-976-1	LEVER (PINCH F) ASSY	
116	3-928-675-01	BELT (52)	
M901	A-3291-644-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	
M902	A-3291-643-A	MOTOR ASSY, SUB (LOADING/TAPE OPERATION)	

7-4. MECHANISM DECK SECTION 2 (MG-52B-135)



Ref. No.	Part No.	Description	Remark
151	1-660-169-11	REEL SENSOR BOARD	
152	3-933-333-01	GEAR (LDG-E)	
153	3-933-345-01	GEAR, REEL	
154	3-701-437-01	POLY-SLIDER (A)	
155	3-933-339-01	SPRING (B-T-F), CONE COIL	
156	X-3371-710-1	CHASSIS (S) ASSY	
157	3-927-100-01	SCREW (+PS 2X10), SPECIAL	
158	3-933-338-01	SCREW (HP), STEP	
* 159	X-3371-712-1	PLATE SUB ASSY, HEAD	
160	3-928-668-01	LEVER (MODE)	
161	3-928-669-01	LEVER (PINCH SELECTION)	
162	3-364-151-01	WASHER	
* 163	X-3371-705-1	CHASSIS (M) ASSY (B)	
164	3-701-437-21	WASHER	
165	A-3291-646-A	CLUTCH (FR) ASSY	
166	3-930-932-01	FLYWHEEL (F) (SEF)	
167	3-933-337-01	SPRING (B-T-R), CONE COIL	
HP901	1-500-157-21	HEAD, MAGNETIC (PLAYBACK)	
S901	1-692-885-11	SWITCH, ROTARY SLIDE (TAPE OPERATION)	

KEY

SECTION 8
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

- Abbreviation
  G : German model

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		*********			
*	3-932-220-01	PLATE (LCD), LIGHT GUIDE			
*	3-932-221-01	SHEET (REFLECTOR)			
*	3-932-222-01	HOLDER (LCD)			
		< CAPACITOR >			
C881-884					
	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
		< CONNECTOR >			
CNJ801	1-774-945-11	PLUG, CONNECTOR 14P			
		< DIODE >			
D851	8-719-058-13	LED	CL-220UR-C-TU (◴)		
D871	8-719-422-76	DIODE	MA8075-M		
D881	8-719-422-64	DIODE	MA8062-M		
D882	8-719-422-64	DIODE	MA8062-M		
D883	8-719-422-64	DIODE	MA8062-M		
D884	8-719-422-64	DIODE	MA8062-M		
D885	8-719-404-46	DIODE	MA110		
D886	8-719-422-43	DIODE	MA8051-H		
D887	8-719-422-43	DIODE	MA8051-H		
D890	8-719-422-64	DIODE	MA8062-M		
		< IC >			
IC801	8-759-331-68	IC	uPD16432AGC-011-9EU		
IC881	8-749-012-25	IC	RS-170-TU		
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-801-192-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< PILOT LAMP >			
PL881	1-517-533-11	LAMP, PILOT			
PL882	1-517-533-11	LAMP, PILOT			
PL883	1-517-533-21	LAMP, PILOT			
PL884	1-517-533-21	LAMP, PILOT			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q871	8-729-106-68	TRANSISTOR	2SD1615A-GP		
Q872	8-729-027-59	TRANSISTOR	DTC144EKA-T146		
Q881	8-729-904-66	TRANSISTOR	DTD113EK		
Q882	8-729-904-66	TRANSISTOR	DTD113EK		
Q883	8-729-904-66	TRANSISTOR	DTD113EK		
Q884	8-729-904-66	TRANSISTOR	DTD113EK		
		< RESISTOR >			
R801-803					
	1-216-647-11	METAL CHIP	680	0.5% 1/10W	
R804	1-208-437-61	METAL GLAZE	1K	2% 1/10W	
R805	1-208-441-61	METAL GLAZE	1.5K	2% 1/10W	
R806	1-208-441-61	METAL GLAZE	1.5K	2% 1/10W	
R807	1-216-659-11	METAL CHIP	2.2K	0.5% 1/10W	
R808	1-208-449-61	METAL GLAZE	3.3K	2% 1/10W	
R809	1-208-453-61	METAL GLAZE	4.7K	2% 1/10W	
R810	1-216-671-11	METAL CHIP	6.8K	0.5% 1/10W	
R811	1-208-462-61	METAL GLAZE	10K	2% 1/10W	
R821-823					
	1-216-647-11	METAL CHIP	680	0.5% 1/10W	
R824	1-208-437-61	METAL GLAZE	1K	2% 1/10W	
R825	1-208-441-61	METAL GLAZE	1.5K	2% 1/10W	
R826	1-208-441-61	METAL GLAZE	1.5K	2% 1/10W	
R827	1-216-659-11	METAL CHIP	2.2K	0.5% 1/10W	
R828	1-208-449-61	METAL GLAZE	3.3K	2% 1/10W	
R829	1-208-453-61	METAL GLAZE	4.7K	2% 1/10W	
R830	1-216-671-11	METAL CHIP	6.8K	0.5% 1/10W	
R831	1-208-462-61	METAL GLAZE	10K	2% 1/10W	
R841	1-216-035-00	METAL CHIP	270	5% 1/10W	
R842	1-216-035-00	METAL CHIP	270	5% 1/10W	
R843-845					
	1-216-029-00	METAL CHIP	150	5% 1/10W	
R847	1-216-029-00	METAL CHIP	150	5% 1/10W	
R848	1-216-029-00	METAL CHIP	150	5% 1/10W	
R849	1-216-031-00	METAL CHIP	180	5% 1/10W	
R850	1-216-033-00	METAL CHIP	220	5% 1/10W	
R851	1-216-035-00	METAL CHIP	270	5% 1/10W	
R852	1-216-035-00	METAL CHIP	270	5% 1/10W	

Ref. No.	Part No.	Description			Remark
R853-856					
	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R861	1-216-033-00	METAL CHIP	220	5%	1/10W
R862	1-216-033-00	METAL CHIP	220	5%	1/10W
R863-865					
	1-216-025-00	METAL GLAZE	100	5%	1/10W
R867	1-216-025-00	METAL GLAZE	100	5%	1/10W
R868	1-216-025-00	METAL GLAZE	100	5%	1/10W
R869	1-216-033-00	METAL CHIP	220	5%	1/10W
R870	1-216-027-00	METAL CHIP	120	5%	1/10W
R871	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R872	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R881	1-216-196-00	METAL GLAZE	820	5%	1/8W
R882	1-216-295-00	CONDUCTOR, CHIP		(2012)	
R883	1-216-295-00	CONDUCTOR, CHIP		(2012)	
R884	1-216-311-00	METAL CHIP	6.8	5%	1/10W
R885	1-216-311-00	METAL CHIP	6.8	5%	1/10W
R886	1-216-025-00	METAL GLAZE	100	5%	1/10W
R887	1-216-041-00	METAL CHIP	470	5%	1/10W
R888	1-216-041-00	METAL CHIP	470	5%	1/10W
R889	1-216-035-00	METAL CHIP	220	5%	1/10W
R890	1-216-295-00	CONDUCTOR, CHIP		(2012)	
R891-896					
	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R897	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R898	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R899	1-216-097-00	METAL GLAZE	100K	5%	1/10W
		< SWITCH >			
S801	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(SOURCE)
S802	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(OFF)
S803	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(+ ▶▶ ▶▶| (SEEK/AMS))
S804	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(+)
S805	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(SOUND)
S806	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(-)
S807	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(- |◀◀ ◀◀ (SEEK/AMS))
S808	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(MUTE)
S809	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(SHIFT)
S810	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(1)
S811	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(2)
S812	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(3)
S821	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(DSPL)
S822	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(LIST)
S823	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(AF/TA)
S824	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(TIR)
S825	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(10)
S826	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(9)
S827	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(8)
S828	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(7)
S829	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(6)
S830	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(5)
S831	1-762-620-11	SWITCH, KEY BOARD (WITH LED)			(4)
**********					
*	A-3309-154-A	MAIN BOARD, COMPLETE (G)			
*	A-3309-155-A	MAIN BOARD, COMPLETE (AEP, UK)			
		**********			
*	3-932-212-01	BRACKET (IC)			
		< BUZZER >			
BZ601	1-504-920-11	BUZZER			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2-4					
	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C5	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C7-9					
	1-126-933-11	ELECT	100uF	20%	10V
C10	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C11-15					
	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C16	1-124-234-00	ELECT	22uF	20%	16V
C17	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C18	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C19	1-163-104-00	CERAMIC CHIP	30PF	5%	50V
C20	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C21	1-126-157-11	ELECT	10uF	20%	16V
C22	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C23	1-137-366-11	FILM	0.0022uF	5%	50V
C24	1-136-159-00	FILM	0.033uF	5%	50V
C25	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C26	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C27	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C28	1-137-368-11	FILM	0.0047uF	5%	50V
C30	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C31	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C32	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C33	1-124-234-00	ELECT	22uF	20%	16V
C34	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C35	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C36	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C37	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C38	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C39	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C40	1-126-162-11	ELECT	3.3uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C41	1-126-159-11	ELECT	0.47uF	20%	50V
C42	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C43	1-126-157-11	ELECT	10uF	20%	16V
C44	1-124-234-00	ELECT	22uF	20%	16V
C45	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C46	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C47	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C48	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C51	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C52	1-126-157-11	ELECT	10uF	20%	16V
C53	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C54	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C55	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C56	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C57	1-124-257-00	ELECT	2.2uF	20%	50V
C58	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C61	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C62	1-104-945-11	ELECT	4.7uF	20%	35V
C63	1-104-945-11	ELECT	4.7uF	20%	35V
C64	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C65	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C66	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C71	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C72	1-104-945-11	ELECT	4.7uF	20%	35V
C73	1-104-945-11	ELECT	4.7uF	20%	35V
C74	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C75	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C76	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C81	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C82	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C84	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C91	1-164-299-11	CERAMIC CHIP	0.22uF	10%	25V
C92	1-164-299-11	CERAMIC CHIP	0.22uF	10%	25V
C97	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C99	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C102	1-130-469-00	MYLAR	680PF	5%	50V
C103	1-130-469-00	MYLAR	680PF	5%	50V
C104	1-136-153-00	FILM	0.01uF	5%	50V
C105	1-136-169-00	FILM	0.22uF	5%	50V
C108	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C109	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C110	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C111	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C112	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C113	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C114	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C120	1-104-945-11	ELECT	4.7uF	20%	35V
C121	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C122	1-163-165-00	CERAMIC CHIP	22PF	5%	50V

Ref. No.	Part No.	Description			Remark
C151	1-104-945-11	ELECT	4.7uF	20%	35V
C152	1-104-945-11	ELECT	4.7uF	20%	35V
C153	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C154	1-104-952-11	ELECT	22uF	20%	16V
C155	1-136-165-00	FILM	0.1uF	5%	50V
C156	1-137-366-11	FILM	0.0022uF	5%	50V
C157	1-104-951-11	ELECT	10uF	20%	16V
C158	1-137-368-11	FILM	0.0047uF	5%	50V
C159	1-104-951-11	ELECT	10uF	20%	16V
C160	1-136-169-00	FILM	0.22uF	5%	50V
C161	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C162	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C171-173					
	1-104-945-11	ELECT	4.7uF	20%	35V
C174	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C175	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C176	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C181-183					
	1-104-945-11	ELECT	4.7uF	20%	35V
C184	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C185	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C186	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C190-192					
	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C193	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C194-199					
	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C202	1-130-469-00	MYLAR	680PF	5%	50V
C203	1-130-469-00	MYLAR	680PF	5%	50V
C204	1-136-153-00	FILM	0.01uF	5%	50V
C205	1-136-169-00	FILM	0.22uF	5%	50V
C206	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C207	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C208	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C220	1-104-945-11	ELECT	4.7uF	20%	35V
C221	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C222	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C251	1-104-945-11	ELECT	4.7uF	20%	35V
C252	1-104-945-11	ELECT	4.7uF	20%	35V
C253	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C254	1-104-952-11	ELECT	22uF	20%	16V
C255	1-136-165-00	FILM	0.1uF	5%	50V
C256	1-137-366-11	FILM	0.0022uF	5%	50V
C257	1-104-951-11	ELECT	10uF	20%	16V
C258	1-137-368-11	FILM	0.0047uF	5%	50V
C259	1-104-951-11	ELECT	10uF	20%	16V
C260	1-136-169-00	FILM	0.22uF	5%	50V
C261	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C262	1-163-229-11	CERAMIC CHIP	12PF	5%	50V

Ref. No.	Part No.	Description			Remark
C271-273					
	1-104-945-11	ELECT	4.7uF	20%	35V
C274	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C275	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C276	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C281-283					
	1-104-945-11	ELECT	4.7uF	20%	35V
C284	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C285	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C286	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C290-292					
	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C293	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C294-299					
	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C308	1-126-277-11	ELECT	100uF	20%	10V
C309-313					
	1-124-257-00	ELECT	2.2uF	20%	50V
C314	1-104-952-11	ELECT	22uF	20%	16V
C322	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C323-325					
	1-126-157-11	ELECT	10uF	20%	16V
C326	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C327	1-104-952-11	ELECT	22uF	20%	16V
C331	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C332	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C333	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C334	1-126-157-11	ELECT	10uF	20%	16V
C336	1-124-234-00	ELECT	22uF	20%	16V
C337	1-126-934-11	ELECT	220uF	20%	16V
C351	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C352	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C353	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C354	1-126-277-11	ELECT	100uF	20%	10V
C355	1-126-277-11	ELECT	100uF	20%	10V
C356	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C357	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C358	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C361	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C362	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C363	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C371	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C372	1-104-952-11	ELECT	22uF	20%	16V
C374	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C381	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C382	1-104-952-11	ELECT	22uF	20%	16V
C384	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C393	1-126-277-11	ELECT	100uF	20%	10V
C394	1-126-277-11	ELECT	100uF	20%	10V
C400	1-164-222-11	CERAMIC CHIP	0.22uF		25V

Ref. No.	Part No.	Description			Remark
C401	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C402	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C403	1-163-809-00	CERAMIC CHIP	0.047uF	10%	25V
C404	1-126-157-11	ELECT	10uF	20%	16V
C405	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C406	1-126-157-11	ELECT	10uF	20%	16V
C407	1-126-157-11	ELECT	10uF	20%	16V
C408	1-163-809-00	CERAMIC CHIP	0.047uF	10%	25V
C409	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C426	1-163-017-00	CERAMIC CHIP	0.0047uF	10%	50V
C427	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C428	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	100V
C451	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C452	1-104-952-11	ELECT	22uF	20%	16V
C453	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C454	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C455	1-126-277-11	ELECT	100uF	20%	10V
C500	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C501	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C502	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C503	1-126-157-11	ELECT	10uF	20%	16V
C504	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C541	1-124-234-00	ELECT	22uF	20%	16V
C542	1-126-157-11	ELECT	10uF	20%	16V
C551	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C552	1-125-705-11	CAPACITOR	0.22F	0	5.5V
C553	1-128-057-11	ELECT	330uF	20%	6.3V
C554	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C560	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C561	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C562	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C571	1-126-157-11	ELECT	10uF	20%	16V
C572	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C580	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C581	1-124-257-00	ELECT	2.2uF	20%	50V
C582	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C583	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C584	1-126-301-11	ELECT	1uF	20%	50V
C585	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C586	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C587	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C603	1-104-945-11	ELECT	4.7uF	20%	50V
C604	1-126-157-11	ELECT	10uF	20%	16V
C605	1-124-234-00	ELECT	22uF	20%	16V
C606	1-124-589-11	ELECT	47uF	20%	16V
C607	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C608	1-124-589-11	ELECT	47uF	20%	16V
C609	1-124-589-11	ELECT	47uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C652-655					
	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C660	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C661	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C701	1-104-945-11	ELECT	4.7uF	20%	35V
C702	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C711	1-104-945-11	ELECT	4.7uF	20%	35V
C712	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C715-718					
	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C721	1-104-945-11	ELECT	4.7uF	20%	35V
C722	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C725-728					
	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C731	1-104-945-11	ELECT	4.7uF	20%	35V
C732	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C750	1-126-277-11	ELECT	100uF	20%	10V
C751-758					
	1-136-165-00	FILM	0.1uF	5%	50V
C761	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C762	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C771	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C772	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C780	1-111-233-11	ELECT	5600uF	20%	16V
C781	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C782	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C783	1-126-157-11	ELECT	10uF	20%	16V
C784	1-104-953-11	ELECT	47uF	20%	16V
C785	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C786	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C788-790					
	1-164-299-11	CERAMIC CHIP	0.22uF	10%	25V
C791	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C792	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C798	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C799	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C902	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C931	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C942-945					
	1-163-104-00	CERAMIC CHIP	30PF	5%	50V
C946	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C971	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C981	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C982	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C991	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C992	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
		< CONNECTOR >			
CNJ571	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)			

Ref. No.	Part No.	Description	Remark
* CNP190	1-750-241-21	PIN, CONNECTOR (PC BOARD) 3P (LINE OUT REAR/LINE OUT)	
CNP301	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P	
* CNP331	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P	
CNP781	1-774-701-11	PIN, CONNECTOR 16P	
CNP851	1-770-409-11	CONNECTOR, BOARD TO BOARD 16P	
		< DISCHARGE GAP >	
CP1	1-519-504-11	GAP, DISCHARGE	
		< DIODE >	
D3	8-719-040-04	DIODE MA721WK-(TX)	
D4	8-719-422-49	DIODE MA8056-L	
D21	8-719-422-97	DIODE MA8091-M	
D95	8-719-422-64	DIODE MA8062-M	
D96	8-719-422-64	DIODE MA8062-M	
D97	8-719-422-64	DIODE MA8062-M	
D98	8-719-422-64	DIODE MA8062-M	
D301	8-719-420-51	DIODE MA729	
D331	8-719-422-97	DIODE MA8091-M	
D332	8-719-404-46	DIODE MA110	
D451	8-719-423-07	DIODE MA8100-L-TX	
D501	8-719-400-20	DIODE MA152WA	
D502	8-719-404-46	DIODE MA110	
D543	8-719-422-12	DIODE MA8039	
D544	8-719-404-46	DIODE MA110	
D551	8-719-404-46	DIODE MA110	
D552	8-719-041-79	DIODE MA721WA-TX	
D553	8-719-400-20	DIODE MA152WA	
D554	8-719-422-64	DIODE MA8062-M	
D561	8-719-422-64	DIODE MA8062-M	
D562	8-719-422-64	DIODE MA8062-M	
D564	8-719-404-46	DIODE MA110	
D571	8-719-422-64	DIODE MA8062-M	
D572	8-719-017-62	DIODE MA8068-L-TX	
D573	8-719-422-64	DIODE MA8062-M	
D574	8-719-422-64	DIODE MA8062-M	
D575	8-719-404-46	DIODE MA110	
D576	8-719-404-46	DIODE MA110	
D581	8-719-404-46	DIODE MA110	
D600	8-719-053-18	DIODE 1SR154-400TE-25	
D601	8-719-053-18	DIODE 1SR154-400TE-25	
D602	8-719-022-90	DIODE MA8160M	
D603	8-719-422-14	DIODE MA8082-M	
D651	8-719-423-21	DIODE MA8110-L-TX	
D652	8-719-423-21	DIODE MA8110-L-TX	
D656	8-719-422-64	DIODE MA8062-M	
D657	8-719-422-64	DIODE MA8062-M	
D781	8-719-422-64	DIODE MA8062-M	

Ref. No.	Part No.	Description	Remark
D782	8-719-017-98	DIODE MA8200-TX	
D783	8-719-049-38	DIODE 1N5404TU	
D790	8-719-422-64	DIODE MA8062-M	
D971	8-719-404-46	DIODE MA110	
		< FUSE >	
F781	1-532-982-11	FUSE (BLADE TYPE) (AUTO FUSE) 15A	
		< IC >	
IC1	8-759-823-81	IC LC7216M	
IC2	8-759-242-66	IC TC4W66F	
IC13	8-759-075-69	IC TC4066BFS-EL	
IC14	8-759-242-66	IC TC4W66F	
IC51	8-759-163-63	IC TDA7330BD-013TR	
IC301	8-752-075-59	IC CXA2511Q-T4	
IC321	8-759-331-72	IC NJM4558E-D(TE2)	
IC324	8-759-367-11	IC HA12181FP-EL	
IC331	8-759-823-87	IC LB1638M	
IC351	8-752-075-48	IC CXA1946AQ-T6	
IC352	8-759-711-85	IC NJM4580E-D	
IC353	8-759-711-85	IC NJM4580E-D	
IC371	8-759-262-37	IC TA2050F(EL)	
IC381	8-759-262-37	IC TA2050F(EL)	
IC501	8-759-385-86	IC uPD78058GC-177-3B9	
IC531	8-759-363-81	IC XC61AN4002PR	
IC551	8-759-399-17	IC MN1883220S4C1	
IC552	8-759-374-66	IC MSM6688GS-2K	
IC553	8-759-180-46	IC MSM6685JSDR1	
IC571	8-759-096-16	IC MM1175XFF	
IC601	8-759-347-49	IC BA3918-V2	
IC781	8-759-369-41	IC HA13155	
		< JACK >	
J1	1-770-279-12	JACK, ANTENNA (ISO) (ANTENNA)	
J561	1-566-822-41	JACK (REMOTE IN)	
J791	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN, LINE OUT/IN)	
		< JUMPER RESISTOR >	
JC1	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC2	1-216-295-00	CONDUCTOR, CHIP (2012)	
		< COIL >	
L3	1-410-196-11	INDUCTOR CHIP 2.2uH	
L4	1-410-196-11	INDUCTOR CHIP 2.2uH	
L11	1-410-204-31	INDUCTOR CHIP 10uH	
L51	1-410-204-31	INDUCTOR CHIP 10uH	
L401	1-410-204-31	INDUCTOR CHIP 10uH	
L501	1-410-204-31	INDUCTOR CHIP 10uH	
L581	1-410-204-31	INDUCTOR CHIP 10uH	
L781	1-411-669-11	COIL, CHOKE	
		< TRANSISTOR >	
Q3	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q4	8-729-900-53	TRANSISTOR DTC114EK	
Q5	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q8	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q22	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q52	8-729-020-67	TRANSISTOR XN1A312-TX	
Q61	8-729-920-21	TRANSISTOR DTC341TK-T-146	
Q71	8-729-920-21	TRANSISTOR DTC341TK-T-146	
Q81	8-729-920-21	TRANSISTOR DTC314TKH04	
Q82	8-729-020-67	TRANSISTOR XN1A312-TX	
Q171	8-729-920-21	TRANSISTOR DTC314TKH04	
Q181	8-729-920-21	TRANSISTOR DTC314TKH04	
Q271	8-729-920-21	TRANSISTOR DTC314TKH04	
Q281	8-729-920-21	TRANSISTOR DTC314TKH04	
Q314	8-729-421-46	TRANSISTOR UN2115-(TX)	
Q331	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q332	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q334	8-729-106-60	TRANSISTOR 2SB1115A	
Q423	8-729-900-53	TRANSISTOR DTC114EK	
Q451	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q452	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q453	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q454	8-729-900-53	TRANSISTOR DTC114EK	
Q502	8-729-900-53	TRANSISTOR DTC114EK	
Q503	8-729-900-53	TRANSISTOR DTC114EK	
Q505	8-729-900-53	TRANSISTOR DTC114EK	
Q541	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q542	8-729-424-52	TRANSISTOR UN211F-TX	
Q543	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q551	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q552	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q571	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q572	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q573	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q603	8-729-900-53	TRANSISTOR DTC114EK	
Q606	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q651	8-729-106-60	TRANSISTOR 2SB1115A	
Q652	8-729-900-53	TRANSISTOR DTC114EK	
Q654	8-729-900-53	TRANSISTOR DTC114EK	
Q655	8-729-030-18	TRANSISTOR 2SD2525	
Q656	8-729-030-18	TRANSISTOR 2SD2525	
Q657	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q658	8-729-900-53	TRANSISTOR DTC114EK	
Q659	8-729-027-23	TRANSISTOR DTA114EKA-T146	

MAIN

Ref. No.	Part No.	Description			Remark
Q660	8-729-920-21	TRANSISTOR	DTC314TKH04		
Q921	8-729-822-84	TRANSISTOR	2SB1202FAST		
Q922	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
		< RESISTOR >			
R1	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R2	1-216-037-00	METAL CHIP	330	5%	1/10W
R3	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R4	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R5	1-218-760-11	METAL GLAZE	220K	2%	1/10W
R6	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R7	1-208-774-11	METAL GLAZE	470	2%	1/10W
R8	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R9	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R13	1-208-449-61	METAL GLAZE	3.3K	2%	1/10W
R14	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R22	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R23	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R24	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R25	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R26	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R27	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R28	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R29	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R30	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R31	1-216-001-00	METAL CHIP	10	5%	1/10W
R32	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R33	1-208-518-61	METAL GLAZE	22K	2%	1/10W
R34	1-216-107-00	METAL CHIP	270K	5%	1/10W
R36	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R37	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R41	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R42	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R53	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R54	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R61	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W (G)
R61	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W (AEP, UK)
R62	1-208-462-61	METAL GLAZE	10K	2%	1/10W (AEP, UK)
R62	1-208-810-11	METAL GLAZE	15K	2%	1/10W (G)
R63	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R64	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R65	1-208-522-61	METAL GLAZE	33K	2%	1/10W
R66	1-208-522-61	METAL GLAZE	33K	2%	1/10W
R67	1-208-435-61	METAL GLAZE	820	2%	1/10W
R68	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R71	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W (G)

Ref. No.	Part No.	Description			Remark
R71	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W (AEP, UK)
R72	1-208-462-61	METAL GLAZE	10K	2%	1/10W (AEP, UK)
R72	1-208-810-11	METAL GLAZE	15K	2%	1/10W (G)
R73	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R74	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R75	1-208-522-61	METAL GLAZE	33K	2%	1/10W
R76	1-208-522-61	METAL GLAZE	33K	2%	1/10W
R77	1-208-435-61	METAL GLAZE	820	2%	1/10W
R78	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R82	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R83	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R84	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R91	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R92	1-208-522-61	METAL GLAZE	33K	2%	1/10W
R93	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R95	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R96	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R97	1-208-365-61	METAL GLAZE	100	2%	1/10W
R98	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R99	1-216-295-00	CONDUCTOR, CHIP			(2012)
R103	1-208-812-11	METAL GLAZE	18K	2%	1/10W
R104	1-208-810-11	METAL GLAZE	15K	2%	1/10W
R105	1-218-764-11	METAL GLAZE	330K	2%	1/10W
R107	1-216-080-00	METAL CHIP	20K	5%	1/10W
R108	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R110	1-208-550-61	METAL GLAZE	470K	2%	1/10W
R111	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R112	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R151	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R152	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R153	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R171	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R172	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R173	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R174	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R175	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R176	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R177	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R178	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R181	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R182	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R183	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R184	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R185	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R186	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R187	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R203	1-208-812-11	METAL GLAZE	18K	2%	1/10W

Ref. No.	Part No.	Description			Remark
R204	1-208-810-11	METAL GLAZE	15K	2%	1/10W
R205	1-218-764-11	METAL GLAZE	330K	2%	1/10W
R208	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R251	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R252	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R253	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R271	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R272	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R273	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R274	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R275	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R276	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R277	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R278	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R281	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R282	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R283	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R284	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R285	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R286	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R287	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R314	1-208-365-61	METAL GLAZE	100	2%	1/10W
R321	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R322	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R324	1-211-952-11	METAL GLAZE	10	2%	1/10W
R331	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R333	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R334	1-208-449-61	METAL GLAZE	3.3K	2%	1/10W
R335-338	1-216-150-91	METAL GLAZE	10	5%	1/8W
R351	1-208-441-61	METAL GLAZE	1.5K	2%	1/10W
R352	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R353	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R354	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R355	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R356	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R357	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R358	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R359	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R360	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R361	1-208-774-11	METAL GLAZE	470	2%	1/10W
R371	1-208-774-11	METAL GLAZE	470	2%	1/10W
R372	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R381	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R401	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R402	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R403	1-208-522-61	METAL GLAZE	33K	2%	1/10W
R404	1-218-760-11	METAL GLAZE	220K	2%	1/10W
R405	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W

Ref. No.	Part No.	Description			Remark
R406	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R407	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R408-414	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R420	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R422	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R423	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R426	1-216-635-11	METAL GLAZE	220	0.5%	1/10W
R427	1-216-001-00	METAL CHIP	10	5%	1/10W
R428	1-216-635-11	METAL GLAZE	220	0.5%	1/10W
R451	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R452	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R453	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R502-505	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R507	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R509	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R510	1-208-518-61	METAL GLAZE	22K	2%	1/10W
R512-514	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R515	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R518-520	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R522	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R523-526	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R527-532	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R534-536	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R537	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R538	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R539	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R540	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R541	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R542	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R544-546	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R548	1-216-037-00	METAL CHIP	330	5%	1/10W
R549	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R551	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R552	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R553	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R554	1-208-774-11	METAL GLAZE	470	2%	1/10W
R555	1-208-774-11	METAL GLAZE	470	2%	1/10W
R561	1-208-365-61	METAL GLAZE	100	2%	1/10W
R562	1-208-365-61	METAL GLAZE	100	2%	1/10W
R571	1-211-952-11	METAL GLAZE	10	2%	1/10W
R572	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R573	1-208-365-61	METAL GLAZE	100	2%	1/10W

MAIN

SEE ADDITIONAL INFORMATION

Ref. No.	Part No.	Description			Remark
R574	1-208-365-61	METAL GLAZE	100	2%	1/10W
R575	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R576	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R577	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R581	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R582-584					
	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R585-587					
	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R589	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R590	1-208-534-61	METAL GLAZE	100K	2%	1/10W (AEP, UK)
R591	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R592	1-208-534-61	METAL GLAZE	100K	2%	1/10W (G)
R593	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R594	1-208-534-61	METAL GLAZE	100K	2%	1/10W
R595-597					
	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R598-600					
	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R601	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R602-604					
	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R605	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R606	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R607	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R608	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R612-619					
	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R621-629					
	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R651	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R652	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R655	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R656	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R659	1-208-526-61	METAL GLAZE	47K	2%	1/10W
R665	1-208-365-61	METAL GLAZE	100	2%	1/10W
R666	1-208-365-61	METAL GLAZE	100	2%	1/10W
R667	1-216-198-91	METAL GLAZE	1K	5%	1/8W
R668	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R669	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R670-673					
	1-216-190-00	METAL GLAZE	470	5%	1/8W
R680	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R681-684					
	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R685	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R686	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R687	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R688	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W

Ref. No.	Part No.	Description			Remark
R690	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R691	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R692	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R701	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R702	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R711	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R712	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R721	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R722	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R731	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R732	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R751-758					
	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R759	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R760	1-208-453-61	METAL GLAZE	4.7K	2%	1/10W
R762	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R772	1-216-635-11	METAL CHIP	220	0.5%	1/10W
R781	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R782	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R783	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R784	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R790	1-208-437-61	METAL GLAZE	1K	2%	1/10W
R900	1-216-295-00	CONDUCTOR, CHIP			(2012)
R921	1-208-462-61	METAL GLAZE	10K	2%	1/10W
R922	1-216-198-00	METAL CHIP	1K	5%	1/8W
R923	1-216-198-00	METAL CHIP	1K	5%	1/8W
R924	1-208-518-61	METAL GLAZE	22K	2%	1/10W
R971	1-216-294-00	METAL CHIP	10M	5%	1/8W

< VARIABLE RESISTOR >

RV1	1-238-861-11	RES, ADJ, CERMET 470K
RV101	1-238-853-11	RES, ADJ, CERMET 1K
RV201	1-238-853-11	RES, ADJ, CERMET 1K

< SWITCH >

S501	1-571-478-11	SWITCH, SLIDE (POWER SELECT)
S551	1-692-431-21	SWITCH, TACTILE (RESET)
S552	1-762-108-11	SWITCH, PUSH (1 KEY) (NOSE DET)
S791	1-554-576-00	SWITCH, SLIDE (LINE OUT/IN)

< VIBRATOR >

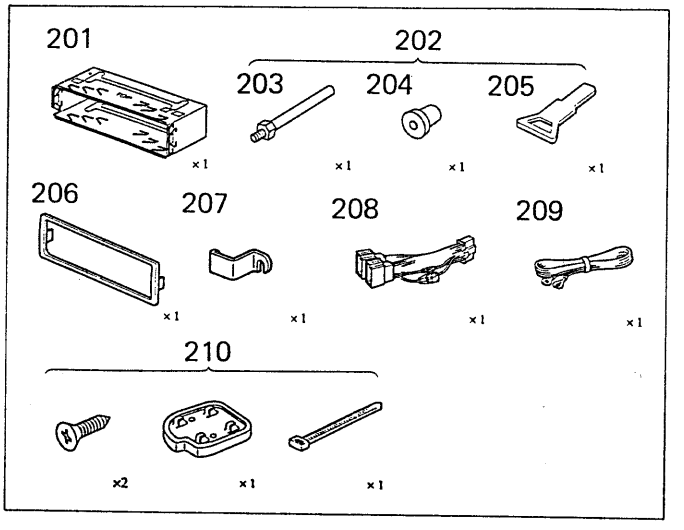
X1	1-577-126-51	VIBRATOR, CRYSTAL (7.2MHz)
X51	1-760-556-11	VIBRATOR, CRYSTAL (4.3MHz)
X401	1-760-096-31	VIBRATOR, CRYSTAL (4.19MHz)
X501	1-760-489-11	VIBRATOR, CERAMIC (5MHz)
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)
X581	1-579-952-21	VIBRATOR, CERAMIC (8MHz)

****

Ref. No.	Part No.	Description	Remark
*	1-660-465-11	SUB BOARD	
		*********	
		< CONNECTOR >	
CN1000	1-774-276-21	SOCKET, CONNECTOR 16P	
CN1001	1-774-944-11	SOCKET, CONNECTOR 14P	
		< DIODE >	
D1001	8-719-422-64	DIODE MA8062-M	
D1002	8-719-422-64	DIODE MA8062-M	
D1003	8-719-422-64	DIODE MA8062-M	
D1004	8-719-422-64	DIODE MA8062-M	
D1005	8-719-422-64	DIODE MA8062-M	
D1006	8-719-058-14	LED CL-220PG-C-TS (CASSETTE DOOR)	
D1007	8-719-058-12	LED CL-220UR-C-TS (TIR)	
		< TRANSISTOR >	
Q1001	8-729-900-53	TRANSISTOR DTC114EK	
Q1002	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q1003	8-729-900-53	TRANSISTOR DTC114EK	
		< RESISTOR >	
R1001	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1002-1005			
	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R1006	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R1007	1-216-029-00	METAL CHIP 150 5% 1/10W	
R1008	1-216-029-00	METAL CHIP 150 5% 1/10W	
R1009	1-216-025-00	METAL CHIP 100 5% 1/10W	
R1010	1-216-025-00	METAL CHIP 100 5% 1/10W	
R1011	1-216-073-00	METAL CHIP 10K 5% 1/10W	
		< SWITCH >	
S1001	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (⏏)	
**********			
		MISCELLANEOUS	
		**********	
19	1-776-527-21	CORD (WITH CONNECTOR) (ISO)	
20	1-751-000-61	CORD (WITH CONNECTOR)	
F781	1-532-982-11	FUSE (BLADE TYPE) (AUTO FUSE) 15A	
HP901	1-500-157-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-644-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	
M902	A-3291-643-A	MOTOR ASSY, SUB (LOADING/TAPE OPERATION)	
S901	1-692-885-11	SWITCH, ROTARY SLIDE (TAPE OPERATION)	
**********			

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-473-067-31	REMOTE COMMANDER (RM-X2S)	
	3-856-246-21	MANUAL, INSTRUCTION, INSTALL (RM-X2S) (ENGLISH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, ITALIAN, PORTUGUESE, CHINESE)	
	3-856-259-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, ITALIAN)	
	3-856-259-21	MANUAL, INSTRUCTION (SPANISH, DUTCH, SWEDISH, PORTUGUESE) (AEP, UK)	
	3-856-263-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN)	
	3-856-263-21	MANUAL, INSTRUCTION, INSTALL (SPANISH, DUTCH, SWEDISH, PORTUGUESE) (AEP, UK)	
	X-3369-665-1	CASE ASSY	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT	
#2	7-621-255-40	SCREW +P 2X6	
#3	7-621-770-67	SCREW +PTT 2.6X6 (S)	
#4	7-621-773-87	SCREW +PTT 2.6X10 (S)	
#5	7-621-773-95	SCREW +PTT 2.6X6 (S)	
#6	7-624-104-04	STOP RING 2.0, TYPE -E	
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3	
#8	7-628-253-00	SCREW +PS 2X4	
**********			

Ref. No.	Part No.	Description	Remark
		MOUNTING HARDWARE	
		**********	
201	3-916-161-41	FRAME, FITTING	
202	X-3370-077-1	SCREW ASSY (AE. KEY), FITTING	
203	3-386-828-01	SCREW, FITTING	
204	3-349-410-01	BUSHING	
205	3-388-078-01	KEY	
206	3-932-209-01	COLLAR	
207	3-936-243-01	STOPPER	
208	1-776-527-21	CORD (WITH CONNECTOR) (ISO)	
209	1-575-616-21	CORD (WITH TERMINAL)	
210	X-3369-817-1	BRACKET ASSY (RM-X2S)	



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SONY
SERVICE MANUAL

AEP Model
UK Model

CORRECTION-1

Correct your service manual as shown below.

☛ : indicates corrected portion.

Page	INCORRECT				CORRECT		
	Ref.No.	Part No.	Description	Remark	Part No.	Description	Remark
70	TU1	————			A-3282-012-A	TUNER UNIT (TUX-006 (E))	

(SPM-96039)

9-923-503-91

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